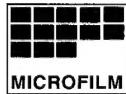
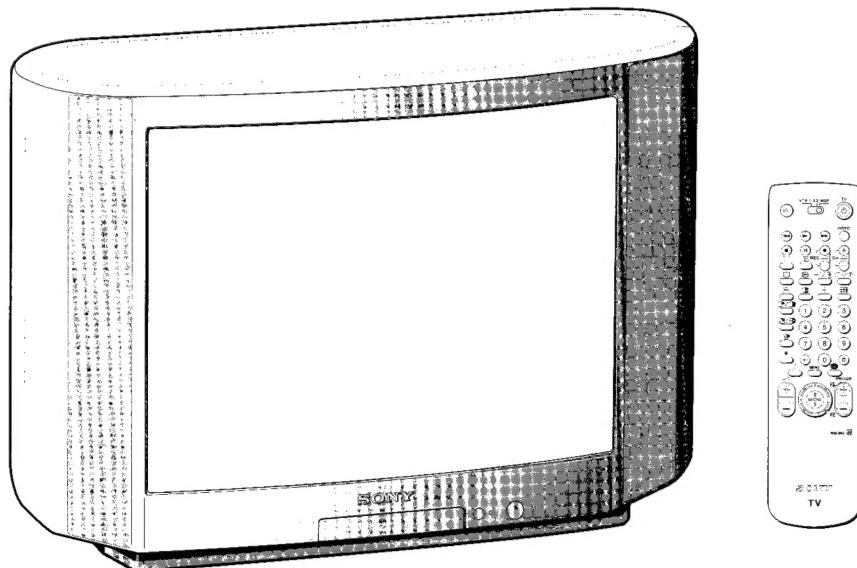


SERVICE MANUAL

AE-4 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-29C3A	RM-862	Italian	SCC-K43A-A	KV-29C3E	RM-862	Spanish	SCC-K42A-A
KV-29C3B	RM-862	French	SCC-K45A-A	KV-29C3K	RM-862	OIRT	SCC-K44A-A
KV-29C3D	RM-862	AEP	SCC-K41A-A	KV-29C3R	RM-862	OIRT	SCC-K44B-A



TRINITRON® COLOR TV
SONY®

ITEM	MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)	
French	B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)	
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)	
Spanish	B/G/H, D/K	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PSECAM NTSC3.58/4.43 (video input only)	
OIRT	B/G, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)	

MODEL	29C3A	29C3B	29C3D	29C3E	29C3K	29C3R
Power Consumption	110W	127W	127W	127W	127W	127W

SPECIFICATIONS

Picture Tube

Super Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured
diagonally) 110° deflection

[FRONT]

- 3 Video input - phono jack
- 3 Audio inputs - phono jacks
- 3 S video input - 4 pin DIN
- Headphones jack: stereo minijack

Rear/Front Terminals

[REAR]

- 21-pin Euro connector (CENELEC standard)
- Inputs for audio and video signals
- Inputs for RGB
- Outputs of TV video and audio signals
- 2/ → 2 21-pin Euro connector
- Inputs for audio and video signals
- Inputs for S video
- Outputs for audio and video signals (selectable)

Sound output	2x30W (music power), 2x15W (RMS)
Dimensions	794x567x530 mm approx.
Weight	Approx. 44.5 kg
Supplied accessories	Remote Commander RM-862 (1) Batteries R6 (2) Aerial cable (1)
Other features	FASTEXT, 100Hz Digital Plus, PIP, NICAM stereo (KV-29C3B only)

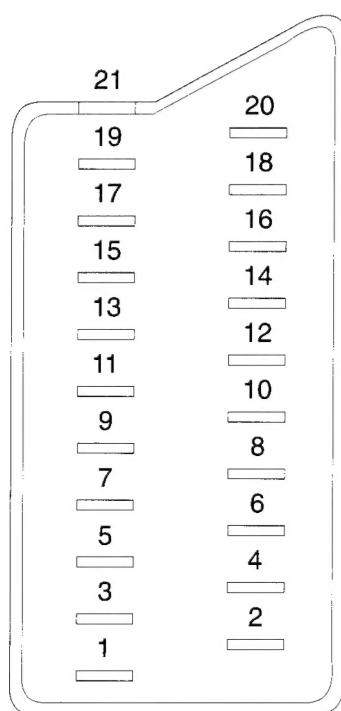
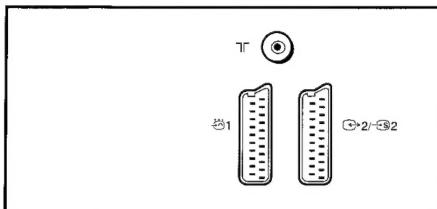
[RM-862]

Remote control system Infrared control
 Power requirements 3V dc (2 batteries) R6 (size AA)
 Dimensions Approx. 210x56x24 mm (w/h/d)
 Weight Approx. 110g
 (Not including battery)

Design and specifications are subject to change without notice.

Item \ Model name	KV-29C3A	KV-29C3B	KV-29C3D	KV-29C3E	KV-29C3K	KV-29C3R
PIP	ON	ON	ON	ON	ON	ON
MPIP	ON	ON	ON	ON	ON	ON
Rotation Coil	ON	ON	ON	ON	ON	ON
VM Set (Velocity Modulation)	ON	ON	ON	ON	ON	ON
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON
TXT	ON	ON	ON	ON	ON	ON
FLOF	ON	ON	ON	ON	ON	ON
TOP	ON	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF	OFF	OFF
Norm D/K	OFF	ON	ON	ON	ON	ON
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Language Preset	Italian	French	German	Spanish	Spanish	Spanish

21 pin connector (1, 2/ 2, 3)



Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) croma input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (Video output)	
18	○	○	○	Ground (Video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (Open) * at 20Hz - 20kHz

Pin No.	Signal	Signal Level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm, positive Sync. 0.3V -3 + 10dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive Sync.

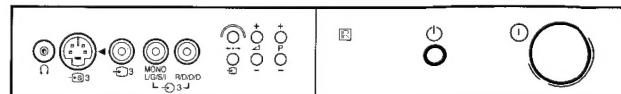
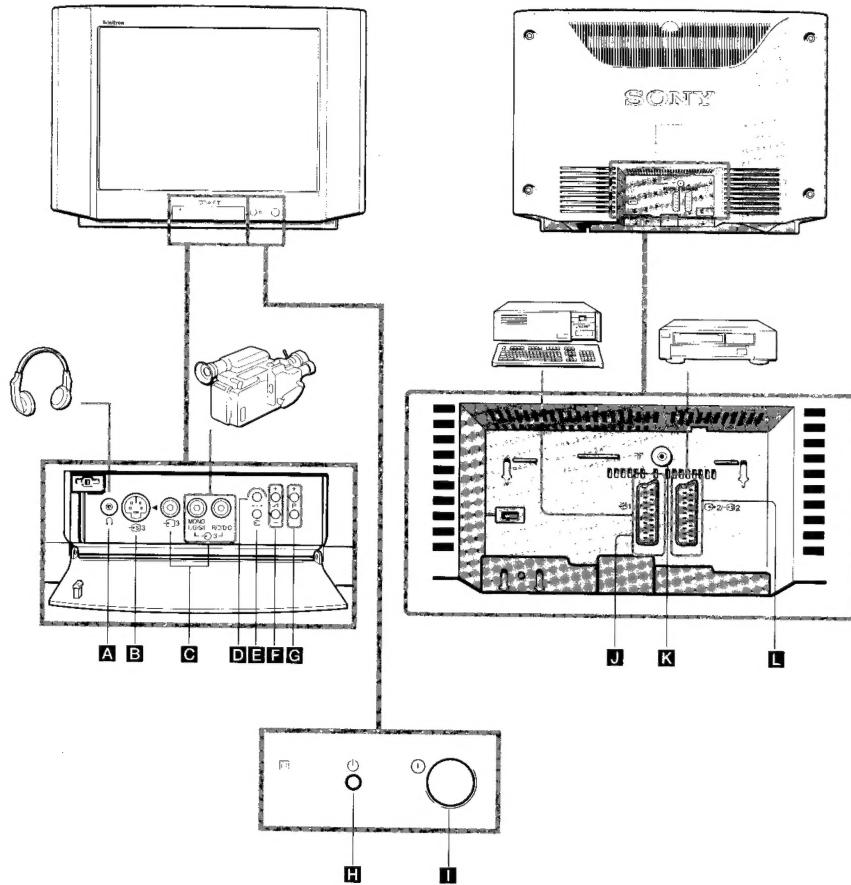


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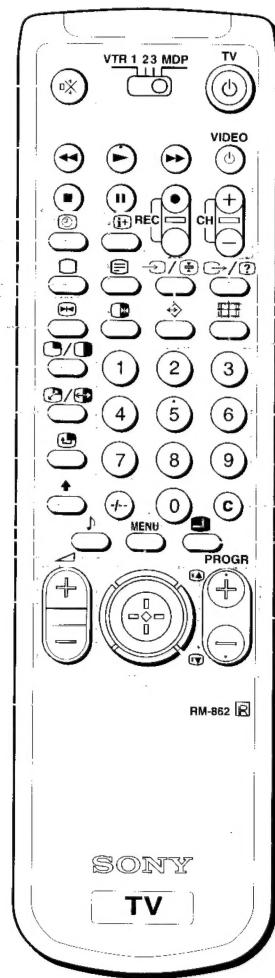
SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual.



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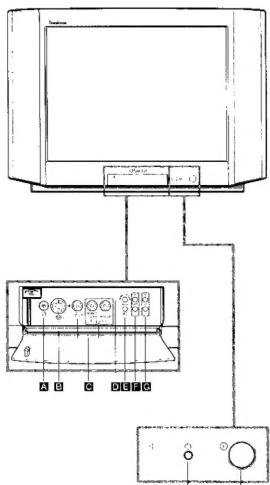
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Overview

This section briefly describes the buttons and controls on the TV set and on the Remote Commander. Please open the flaps at the front and at the back of the Instruction Manual for detailed illustrations of the Remote Commander and the TV set. Letters in boxes refer to the buttons and connectors on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the pages given next to each description.

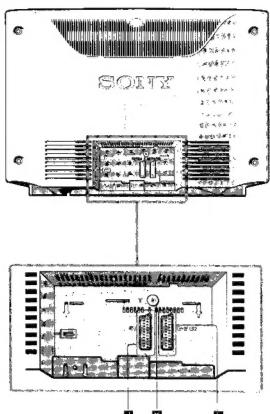
TV set – front

Reference and Symbol	Name	Refer to page
A	Headphones jack	35
B	S video input jack	40
C	Input jacks (video, audio)	40
D	Reset button	28
E	Input mode button	28
F	Volume control	28
G	Programme buttons	28
H	Standby mode indicator	28
I	Main power switch	28



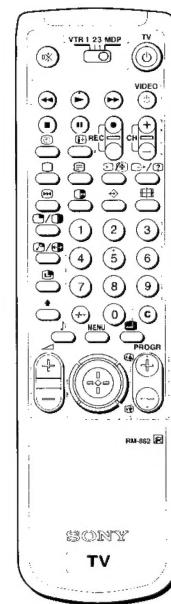
TV set – rear

Reference and Symbol	Name	Refer to page
J	21-pin Euro connector	40
K	Aerial socket	26
L	21-pin Euro connector	40



Remote Commander

Reference and Symbol	Name	Refer to page
1	Muting on/off button	28
2	VCR operation	41
VTR 123 MDP	Video equipment selector	41
	Video equipment operation buttons	41
VIDEO CH +/-		
3	On-screen display button	28
4	Time display button	28
5	Teletext button	28, 37
6	TV power on/TV mode button	28
7	No function on this set	
8	Freeze button	28
9	PIP on/off button	36
10	PIP Swap button	36
11	PIP position button	36
12	PIP source selector	36
13	Double digit entering button	28
14	Sound mode button	34
15	Menu on/off button	29
16	Volume control buttons	28
17	Joystick for Menu selection	29
18	Press to confirm selection (OK function)	
19	TV standby button	28
20	Output mode selector	40
21	Teletext: Reveal button	37
22	Teletext: Freezing the subpage	37
23	Teletext: Favourite pages button	39
24	No function on this set	
25	Number buttons	28
26	Direct channel entering button	28
	Picture mode button	34
	Programme buttons	28
	Teletext: Page up/page down buttons	37

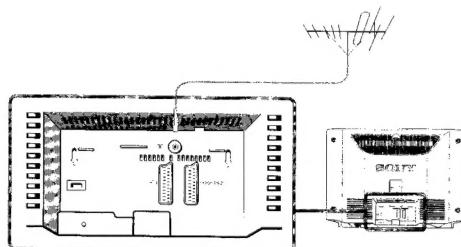


Basic Operation

Step 1 Installation

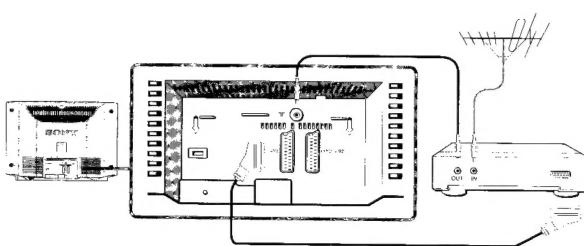
A Connecting the Aerial

(If you connect a VCR, skip to step B)
Insert the aerial plug of the supplied aerial cable tightly into the aerial socket **K**.



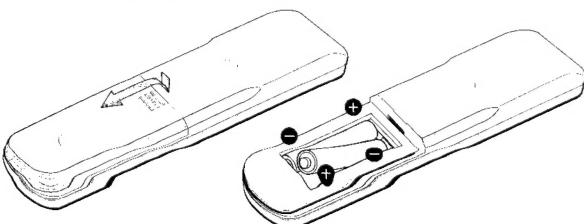
B Connecting a VCR

We recommend that you tune in the VCR signal to the programme position »0«. Use the preset function »Manual Programme Preset« (page 29) to do this.



C Inserting the batteries into the Remote Commander

Insert the batteries checking the correct polarities.



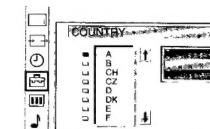
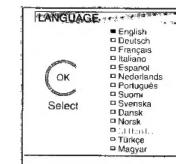
! Respect your environment! Dispose of used batteries in an environmental friendly way.

Step 2 Basic Presetting

A Choosing the Menu Language and the Country

Using this function you select the language of the menu screens. Also you select the country in which you will use the TV. In this way the channels of the selected country will automatically get the top positions during automatic presetting.

- 1 Press the power switch **1** on the TV. If the standby indicator **H** on the TV is lit, press **□** or a number button **0** on the Remote Commander. Press the MENU button **15** on the Remote Commander. The menu LANGUAGE appears.
- 2 Push the joystick **17** to blue or green to select the language. Press the joystick **17** to confirm your selection. The menu COUNTRY appears.
- 3 Push the joystick **17** to blue or green to select the country in which you wish to operate the TV. Press the joystick **17** to confirm the selection.
- 4 Press MENU **15** to restore the normal TV picture.



B Presetting Channels Automatically

With this function the TV automatically searches and stores up to 100 channels onto programme positions. If you prefer »Manual Presetting of channels« please refer to page 29 in Advanced Operation.

- 1 Press MENU **15**.
- 2 Push the joystick **17** to blue or green to select the symbol **■** on the menu screen, then push to yellow.
- 3 Push the joystick **17** to blue or green to select »Auto Programme«, then push to yellow. The menu AUTO PROGRAMME appears.
- 4 a) All items shown on the menu screen are as wanted: Press joystick **17** to select START. Now the automatic channel presetting starts from programme position 1.
- 4 b) You wish to change items as shown on the menu screen: Push the joystick **17** to blue or green. Push to yellow repeatedly until the desired item is highlighted.

Push the joystick **17** to blue or green to select the following possibilities:

ACI
(Automatic Channel Installation, depending on availability of service in your country) on: fast channel presetting by special networks using the channel frequency (e.g. F055)
TV-system and station label
off: ACI is not active, only ITP (Intelligent Tuner Preset)

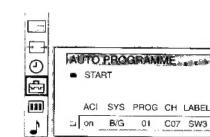
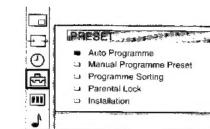
SYS (TV Broadcast System)
B/G for Western European Countries
D/K for Eastern European Countries

PROG (Programme Position)
Presetting automatically starts from position 1.

CH (channel)
C to start presetting with terrestrial channels
S to start presetting with cable channels

Press the joystick **17** as soon as the automatic presetting should start.

- 5 After presetting the normal TV picture reappears.



Joystick

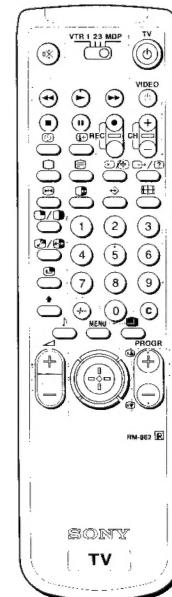
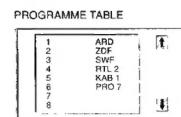
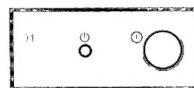


Step 3 TV operation

Using Direct Access Buttons

This section explains functions used while watching TV. Most operations are carried out using the Remote Commander (numbers in circles). All basic functions are also available on the TV set itself (letters in boxes).

To	Press
Switch on	• ① I on TV.
Switch off temporarily (Standby mode)	• ② H . TV is now in standby mode and indicator H lights up.
Switch on from standby mode	• ③ G , PROGR +/- or any number button ②.
Switch off completely	• ① I on TV. ! To save energy, we recommend to switch off your TV completely when TV is not in use.
Select programmes	• PROGR +/- or G or number buttons ②. For double digit number, press -/- ⑩, then the two number buttons ②. E.g. for 24, press -/- ⑩, then 2 and 4.
Display a programme table	• The joystick ⑦. Push the joystick ⑦ to blue or green to select a programme, then press the joystick ⑦ to confirm.
Display on screen indications	• ② I . Press again to make the indications disappear.
Adjust the volume	• ▲ or - ⑬ F .
Mute the sound	• M . Press again to restore the sound.
Display the time (only available when teletext is broadcast)	• ② I . Press again to make the display disappear.
Tune in a channel temporarily	• »C« ② once for terrestrial channels, twice for cable channels. The indication »C« or »S« for cable channels appears. Enter the channel number with two digits, e.g. for 4, press 0, then 4.
View the input of a connected device (see also page 40)	• ② ⑩ E repeatedly until the desired input signal appears. Press ② to restore the normal TV picture.
View teletext (see also page 37)	• ② ⑩ E to switch on. Input a page number, using the number buttons ② (e.g. for page 125, press 1, 2 and 5). ② to switch off.
Freeze the picture	• ② ⑩ B . Press again to restore the normal TV picture.
Reset picture settings to factory levels	• →← D .



Advanced Operation

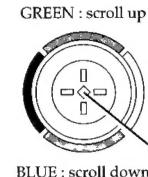
Using the Menu System

Use the following buttons on the Remote Commander to operate the Menu system:

1 Press MENU button ⑬ to switch menu on or off.



2 Use the joystick ⑦ as follows:



GREEN : scroll up
RED : decrease/back to last item or to last menu
When menu is not displayed:
Push to red to display the last menu screen

BLUE : scroll down

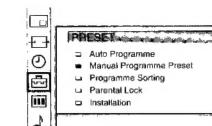
Joystick: Press at its neutral position to confirm selection or store

Advanced Presetting

Presetting Channels Manually

Using this function you can preset channels one by one to different programme positions. It is also convenient to allocate programme numbers to video input sources.

1 Press MENU ⑬.



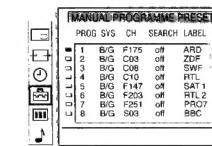
2 Push joystick ⑦ to blue or green to select the symbol ⑩ on the menu screen. Push to yellow to confirm the selection.

3 Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm the selection.

4 Push to blue or green to select the programme position (PROG) to which you want to preset a channel. Push to yellow to confirm.

5 Push to blue or green to select the TV broadcast system (SYS) (B/G for western European countries, D/K for eastern European countries) or a video input source (EXT). Push to yellow to confirm.

6 Push to blue or green to select »C« (for terrestrial channels), »S« (for cable channels) or »F« (for channel frequency). Push to yellow to confirm.



There are two possibilities to preset channels manually:

a) You know the channel number or channel frequency.
Please use method »Direct input«.

or

b) You don't know the channel number or frequency.
Please use method »Search«.

continued >>>>>

Advanced Presetting

7a) Direct Input

For channel numbers you need to input a two digit number, for the frequency a three digit number.

- Push to blue or green to select the first digit of the channel number or frequency. Push to yellow to confirm.
- Push to blue or green to select the second digit of the number or frequency. Push to yellow to confirm. In case of the channel number the search starts.
- Push to blue or green to select the third digit of the frequency number. Push to yellow to start the search of the frequency.
- To continue search for another channel: Push to blue or green.
- To store the selected channel: Press the joystick **17**.
- Repeat steps 4 to 7a) to preset other channels.

7b) Search

Push repeatedly to yellow until a blue and a green arrow appear in the section SEARCH.

- Push to blue or green to search for the next available channel.
- To continue search for another channel: Push to blue or green.
- To store the selected channel: Press the joystick **17**.
- Repeat steps 4 to 7b) to preset other channels.



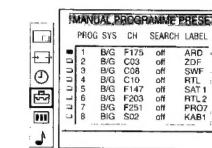
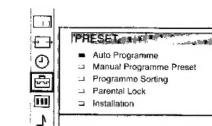
Advanced Presetting

Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROGR +/- buttons. However, by using the number buttons you can still select the skipped programme position.

- Press MENU **16**.
- Push joystick **17** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm.
- Push to blue or green to select the programme position you want to skip. Push to yellow to confirm.
- Push to blue or green to select »----« in the position SYS (system). Press the joystick **17** to confirm.
- Repeat steps 4 and 5 to skip other programme positions.
- Press MENU **16** to restore the normal TV picture.

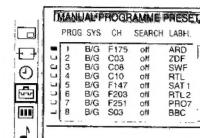
Joystick



Captioning a Station Name

Channels are usually automatically labelled during presetting. You can, however, individually name a channel or a video source using up to five characters.

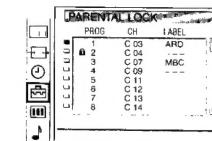
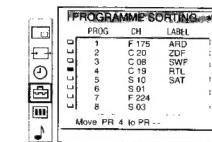
- Press MENU **16**.
- Push joystick **17** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm.
- Push to blue or green to select the programme position with the channel you want to label. Push to yellow repeatedly until the first element of the position LABEL is highlighted.
- Push to blue or green to select a letter or a number (select »--« for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- After selecting all characters, press the joystick **17**.
- Repeat steps 4 to 6 to label other channels or video sources.
- Press MENU **16** to restore the normal TV picture.



Sorting Programme Positions

This function enables you to sort the programme positions to a preferable order.

- Press MENU **16**.
- Push joystick **17** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Programme Sorting«. Push to yellow to confirm.
- Push to blue or green to select the programme position of the channel you want to exchange. Press joystick **17** to confirm.
- Push to blue or green to select the programme position of the second channel. Press joystick **17** to confirm. Now the two programme positions are swapped and sorted.
- Repeat steps 4 and 5 to sort other programme positions.
- Press Menu **16** to restore the normal TV picture.



Using Parental Lock

This function enables you to prevent children watching undesirable broadcasts.

- Press MENU **16**.
- Push joystick **17** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- Push to green or blue to select »Parental Lock«. Push to yellow to confirm.
- Push to green or blue to select the channel you want to block. Press the joystick **17** to confirm. The symbol appears before the programme position to indicate that this channel is now blocked.
- Repeat step 4 to block other channels.
- Press MENU **16** to restore the normal TV picture.

! To unblock: Select the channel to unblock in the menu »Parental Lock«. Press the joystick **17**. The symbol disappears.

Advanced Presetting

Using »Further Programme Preset«

Using the menu »Further Programme Preset« you can

- a) individually adjust and store the volume level of each channel (Volume offset).
- b) in case of picture distortions use manual fine tuning to obtain a better picture quality. The factory setting is »on« for AFT (Automatic Fine Tuning).

- 1 Press MENU ⑯.
- 2 Push joystick ⑯ to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Installation«. Push to yellow to confirm.
- 4 Push to blue or green to select »Further Programme Preset«. Push to yellow to confirm.
- 5 Push to blue or green to select the programme position you want. Push to yellow repeatedly to select:
a) VOL (Volume Offset) or b) AFT (Automatic Fine Tuning). The selected item changes colour.
- 6a) VOL
Push to blue or green to adjust the volume for the selected programme position within a range of -7 to +7. Press the joystick ⑯ to confirm. Repeat step 6 to set the volume level for other programme positions.
- 6b) AFT
Push to blue or green to fine-tune the channel within a range of -15 to +15. Press the joystick ⑯ to confirm. Repeat step 6 to fine-tune other channels.
- 7 Press MENU ⑯ to restore the normal TV picture.

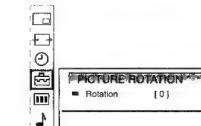


Advanced Presetting

Adjusting the Picture Rotation

If, due to the earth magnetism, the picture slants, you can use this function to readjust the picture.

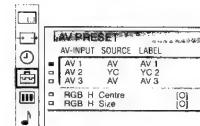
- 1 Press MENU ⑯.
- 2 Push joystick ⑯ to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Installation«. Push to yellow to confirm.
- 4 Push to blue or green to select »Picture Rotation«. Push to yellow to confirm.
- 5 Push to yellow. Push to blue or green to adjust the picture rotation. The adjusting range is -4 to +4. Press the joystick ⑯ to confirm.
- 6 Press MENU ⑯ to restore the normal TV picture.



Using »AV Preset«

Using this function you can preset the desired input source (e.g.  1, RGB signal) to the respective AV input (AV1). In this way a connected VCR switches automatically to the RGB signal. Also you can label the input sources.

- 1 Press MENU ⑯.
- 2 Push joystick ⑯ to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Installation«. Push to yellow. Push to blue or green to select »AV Preset«. Push to yellow to confirm.
- 4 Push to blue or green to select the desired AV input. Push to yellow to confirm.
- 5 Push to blue or green to select the desired source. Push to yellow to confirm. For the respective AV inputs you have the following choice:
AV1: RGB or AV
AV2: YC2 or AV
AV3: YC3 or AV
- 6 To label a source: Push to blue or green to select the first character (letter or number, »« for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- 7 Press the joystick ⑯ to store.
- 8 Repeat steps 4 to 7 for the other AV inputs.
- 9 For RGB input source only: Push to blue or green to select RGB H Centre.
 - Push to yellow to confirm.
 - Push to blue or green to adjust the centre of the picture in a range of -5 to +5. Press the joystick ⑯ to store.
 - Repeat step 9 to adjust RGB H Size.
- 10 Press MENU ⑯ to restore the normal TV picture.



Advanced TV operation

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

- 1 Press **■** (for Picture) or **♪** (for Sound) or **MENU** 15.
- 2 Push joystick **1** to blue or green to select **PICTURE CONTROL** for Picture Control or **SOUND CONTROL** for Sound Control. Push to yellow to confirm. The menu PICTURE CONTROL or SOUND CONTROL appears.
- 3 Push to blue or green to select the desired item. Push to yellow to confirm.
- 4 Push to red or yellow to adjust the selected item. Press the joystick **1** to confirm. For the effect of each control, see the following tables.
- 5 Repeat steps 2 and 3 to adjust other items.
- 6 Press **MENU** 15 to restore the normal TV picture.

Picture Control

Item	Effect
Picture Mode	• Personal → Economy (energy saving setting) → Live → Sports → Movie → Game
Contrast	• Less — — More
Brightness*	• Darker — — Brighter
Colour*	• Less — — More
Hue**	• Greenish — — Reddish
Sharpness*	• Softer — — Sharper
Reset	• Resets picture to the factory preset levels
Lumisponder	• Off: Normal On: Automatic optimization of picture level according to the surrounding lighting level
Screen Mode	• Auto (automatic selection of 16:9 broadcasts decoded in 4:3) → 4:3 → 16:9
Noise Reduction	• Off: Normal On: Reduction of picture noise in case of weak signals

* Only if »Personal« or »Economy« is selected in »Picture Mode«.

** Available for NTSC colour system only.

Joystick



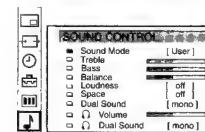
Advanced TV operation

Sound Control

Item	Effect
Sound Mode	• Choice between different sound effects User → Pop → Jazz → Rock
Treble*	• Less — — More
Bass*	• Less — — More
Balance	• More left — — More right
Loudness*	• Off: normal On: for music broadcasts
Space	• Off: normal On: special acoustic effect
Dual Sound	• A: channel 1 or B: channel 2 Stereo → Mono
Headphones	
Volume	• Less — — More
Dual Sound	• A: channel 1 or B: channel 2 → PIP (if PIP is switched on, you can select the PIP sound for the headphones) → Stereo → Mono

* Only if »User« is selected in »Sound Mode«

Joystick

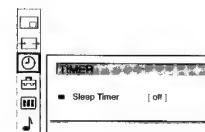


Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

- 1 Press **MENU** 15.
- 2 Push joystick **1** to blue or green to select the symbol **①** on the menu screen. Push to yellow to confirm.
- 3 Push to yellow. Push to blue or green to select the time. OFF → 10 min → 20 min 80 min → 90 min. Press the joystick **1** to confirm.
- 4 Press **MENU** 15 to restore the normal TV picture.

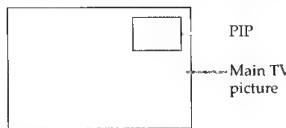
! One minute before the TV switches into standby mode, a message is displayed on the screen.



Advanced TV operation

PIP (Picture-in-Picture)

With this function you can display a »PIP screen« (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or vice versa.



Switching PIP on and off

Press C/D ⑩.

The PIP screen will be displayed. The PIP picture comes from the source chosen when the TV was last used.

To switch PIP off

Press C/D ⑩ again.

or

1 Press MENU ⑯.

2 Push joystick ⑪ to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.

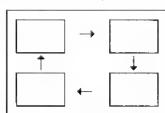
3 Push to yellow. Push to blue or green to select »On« or »Off«. Press joystick ⑪ to confirm.

4 To change the PIP Position: Push to blue or green to select »PIP Position«. Push to yellow. Push to blue, green, red or yellow to select one of the four positions. Press joystick ⑪ to confirm.

5 Press MENU ⑯ to restore the normal TV picture.

Changing the position of the PIP

Press C/D ⑩ repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.



Selecting a PIP source

Press I ⑫.

The symbol  will be displayed at the bottom, left-hand corner of the screen. Press C/D ⑯ repeatedly until the desired source is indicated (e.g. TV, AV1, AV2, YC2, AV3, YC3, AV4, YC4).

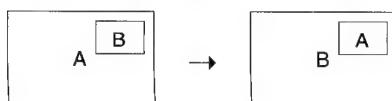
Tips

- If no video source has been connected, the PIP picture will be noisy.
- A RGB input source cannot be displayed in PIP.

Swapping screens

Press C/D ⑩.

The main screen will switch the picture with the PIP screen.



! If the PIP screen shows a TV programme and the main picture a video source, and you want to change channels, first press I ⑫ and then the programme buttons ⑯ or PROGR +/- ⑯.

Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) informs you about how to use the service. Make sure to use a TV channel with a strong signal, otherwise Teletext errors may occur.

Direct Access Function

Switching Teletext on and off

1 Select the TV channel which carries the teletext service you want to view.

2 Press C/D ⑯ once to switch Teletext on.

Press C/D ⑯ twice for Mix mode. The normal TV screen and the Teletext screen are overlapped.

3 Press C/D ⑯ to switch Teletext off.

Selecting a Teletext page

Direct Page Selection

Use the number buttons ⑯ to input three digits of the page number.

If you have made a mistake: Type in any three digits, then reenter the correct page number.

Page Catching

1 Select a teletext page with page numbers (e.g. index page).

2 Press the joystick ⑪. »Page Catching« is displayed at the top of the page.

Push joystick ⑪ to blue or green to select the page you want. Press the joystick ⑪. The requested page is displayed after some seconds.

Press C/D ⑯ to resume normal teletext reception.

Accessing the next or preceding page

Press C/D ⑯ (Page +) or C/D ⑯ (Page -).

Freezing a teletext subpage

Press C/D ⑯. The symbol  is displayed.

Press C/D ⑯ to resume normal teletext reception.

Revealing hidden information (e.g. for a quiz)

Press C/D ⑯. Press again to cancel.

Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke. When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue marks on the Remote Commander. Push the joystick ⑪ to the colour mark which corresponds to the colour-coded menu. The page is displayed after some seconds.

Joystick



continued >>>>>

Teletext

Using the Teletext Menu

Your TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the buttons for menu operation to operate the teletext menu. Select the teletext menu functions as follows:

- 1 Press MENU . The menu is superimposed on the teletext display.
- 2 Push the joystick  to blue or green to select the teletext function you want. Push to yellow to confirm the selection.

USER PAGES/PRESET USER PAGES

See page 39 for information about presetting and operating the user pages.

INDEX

The index gives you an overview of the contents of the teletext you are using.

TOP/BOTTOM/FULL

For convenient reading of a teletext page you can enlarge the teletext page. After selecting the function, an information line »F Top G Bottom OK Full« is displayed. Push joystick  to green to enlarge the upper half, push to blue to enlarge the lower half. Press the joystick  to resume the normal display. Press  to resume normal teletext reception.

TEXT CLEAR

After selecting the function, you can watch a TV programme while waiting for a requested teletext page to be captured. When the page is available, the symbol  changes colour. Press  to view the requested page.

SUBTITLES

Check with your teletext service for information about subtitled TV programmes. After selecting the function the subtitles are displayed.

TIME PAGE

Check with your teletext service about the availability of time coded pages. If available, you can call up a page (e.g. an alarm page) at a certain time.

- 1 Select TIME PAGE in the teletext menu. Push joystick  to yellow. An information window is displayed. Push to blue or green to select »On«. Push to yellow.
- 2 Use the number buttons  to enter the three digits of the page you want (e.g. 301). Push to yellow after each digit.
- 3 Use the number buttons  to enter the four digits of the desired time (e.g. 18-54). Push to yellow after each digit. Press joystick  to confirm. Press MENU . The time is displayed in the top left-hand corner of the screen. At the requested time the page is displayed.

SUBPAGE

Using this function you can select a particular teletext page from several subpages (e.g. page 2 of 6 pages in total). After selecting the function an information line is displayed. Use the number buttons  to enter the four digits (e.g. enter 0002 for the second page of a sequence).

To cancel the request: Push joystick  to red and then to yellow.

Joystick



Teletext

User Page Bank System

You can store up to 6 of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

- 1 Press  to switch Teletext on. Press MENU .
- 2 Push joystick  to blue or green to select »Preset User Pages«. Push to yellow to confirm.
- 3 Push to blue or green to select the bank (from A to E) you want. Push to yellow to confirm.
- 4 Push to blue or green to select the three digits of your first favourite page. Push to yellow after each digit. Push to yellow to confirm.
- 5 Repeat step 4 for the other 5 favourite pages. If you do not want to preset all 6 page numbers push to yellow without inserting any number. After finishing the presetting, press the joystick .
- 6 Push to blue or green to select »Allocate Bank«. Push to yellow to confirm.
- 7 Push to blue or green to select the programme position of the channel which carries the teletext service for which you have selected your favourite pages. Push to yellow to confirm.
- 8 Push to blue or green to select the bank from step 3. Press the joystick  to confirm.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

Displaying User Pages

- 1 Press MENU .
- 2 Push joystick  to blue or green to select »User Pages«. Push to yellow to confirm.
- 3 Push to blue or green to select the page you want. Press the joystick .
The page is displayed after some seconds.
or
1 Press .
2 Push joystick  to blue or green to select the page you want. Press the joystick .
The page is displayed after some seconds.

Joystick



PRES. USER PAGES						PAGE	
	BANK	P1	P2	P3	P4	P5	P6
A	300	255	456	234	200	179	
B	200	120	301	303	550	345	
C	100	220	304	344			
D	128	321	252				
E	400	238	240	118	127		

 Allocate Bank
PROG LABEL BANK PROG LABEL BANK
01 BBC1 A 05 SKY D
02 BBC2 C 06 TV C

USER PAGES BANK BY					
	PAGE	300	255	456	234
1	300				
2	255				
3	456				
4	234				
5					
6					
7					
8					
9					
0					

Optional Equipment

Connecting Optional Equipment

You can connect a wide range of optional equipment to your TV. Refer to the illustrations on the back flap page of this Instruction Manual.

Symbol	Acceptable input signals	Available output signals
1	Normal audio/video and RGB	Audio/video from TV tuner
2/-3	Normal audio/video and S video	Audio/video from selected source
3	Normal audio/video and S video	No output

About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Tips:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.

Selecting Input and Output Signals

a) Direct Access Buttons

Selecting the Input

Press \square \square \square repeatedly to select one of the following input modes:

Symbol on the screen	Input signals
1	Audio/video through Euro AV connector J
2	RGB through Euro AV connector J
2	Audio/video through Euro AV connector L
2	S video through Euro AV connector L
3	Audio/video through the phono jacks C
3	S video through the 4 pin DIN B

Press \square \square to restore the normal TV picture.

Selecting the Output from Euro AV connector \square \square \square **L**

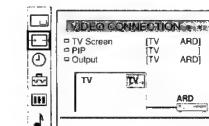
Press \square \square repeatedly to select one of the following output sources for the connector \square \square \square **L**:

Symbol on the screen	\square \square \square L connector output signal
1 \square	Audio/video from Euro AV connector J
2 \square	Audio/video from Euro AV connector L
2 \square	Audio/video from Euro AV connector L
3 \square	Audio/video from the phono jacks C
3 \square	Audio/video from the 4 pin DIN B
TV	Audio/video from the aerial terminal K

Optional Equipment

b) Using the Menu »Video Connection«

- 1 Press MENU **15**.
- 2 Push joystick **17** to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »TV screen« (input source for TV-screen), PIP (source for PIP screen), or »Output« (output source for \square \square \square **L**). Push to yellow to confirm. You can select between the following sources:
 - TV: TV-tuner • YC: S video signal • AV: Audio/Video
 - TV screen: TV, AV1, RGB, AV2, YC2, AV3, YC3
 - PIP: TV, AV1, AV2, YC2, AV3, YC3
 - Output: TV, AV1, AV2, YC2, AV3, YC3
- 4 Push to blue or green to select the desired source. Press joystick **17** to store.
- 5 Press MENU **15** to restore the normal TV picture.



Joystick



Remote Control of other Sony Equipment

Using the buttons **2** on the Remote Commander you can control other Sony equipment.

- 1 Set the selector VTR 1 2 3 MDP according to the equipment you want to control.

VTR 1: Beta VCR
 VTR 2: 8mm VCR
 VTR3: VHS VCR
 MDP: Video Disk Player

- 2 Use the buttons **2** on the Remote Commander to operate the equipment.

Tips

- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1 2 3 MDP selector on the TV Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander does not work.

Additional Information

Troubleshooting

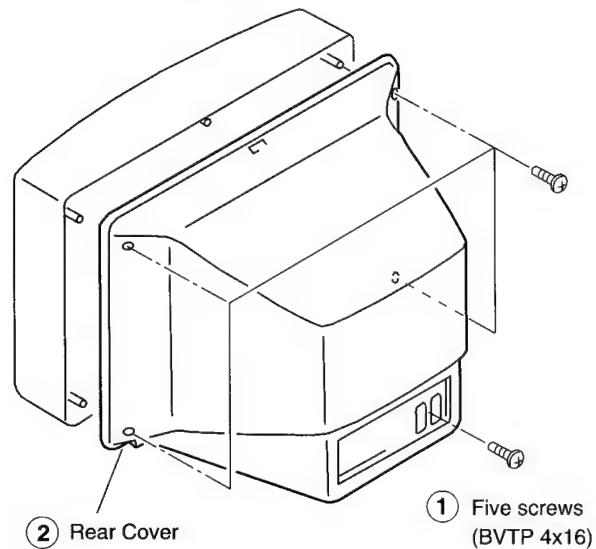
Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none">• Plug the TV in.• Press   on the TV. (If  indicator  is on, press   or a programme number  on the Remote Commander.)• Check the aerial connection.• Check if the selected video source is on.• Turn the TV off for 3 or 4 seconds and then turn it on again using  .
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none">• Press   to enter the PICTURE CONTROL menu and adjust »Brightness«, »Contrast« and »Colour«.
Poor picture quality when watching an RGB video source	<ul style="list-style-type: none">• Press   repeatedly to select .
Good picture but poor or no sound	<ul style="list-style-type: none">• Press  + .• If  is displayed on the screen, press  .
No colour for colour programmes	<ul style="list-style-type: none">• Press   to enter the PICTURE CONTROL menu, select RESET, then press joystick .
Remote Commander does not function.	<ul style="list-style-type: none">• Replace batteries.

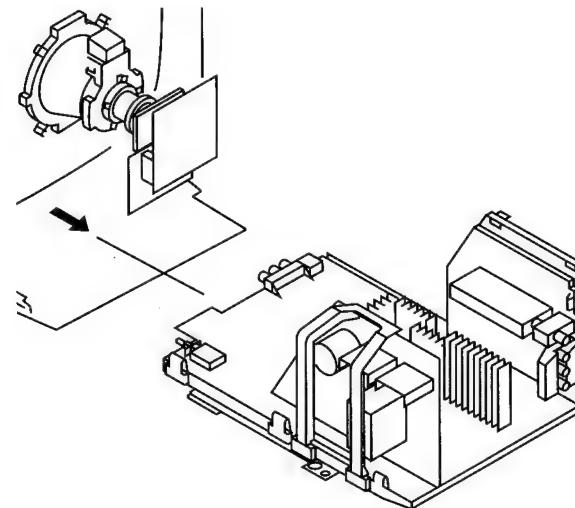
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2 DISASSEMBLY

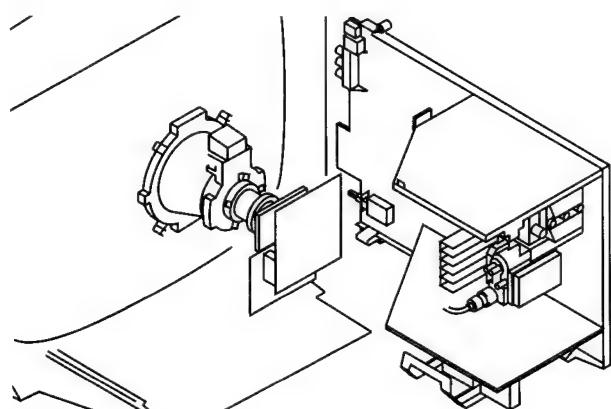
2-1. REAR COVER REMOVAL



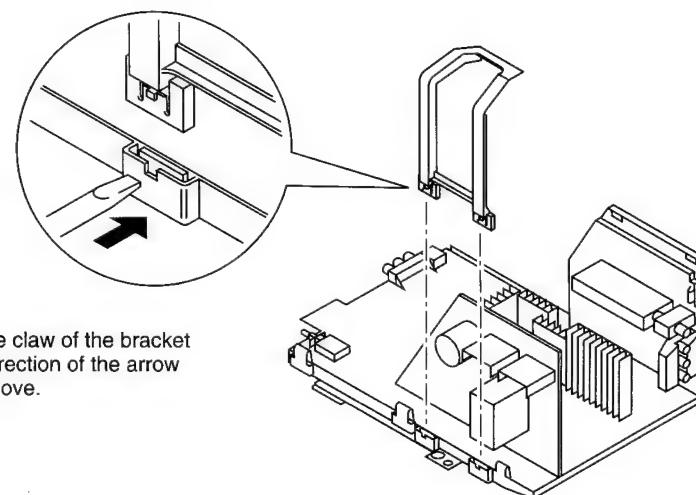
2-2. CHASSIS ASSY REMOVAL



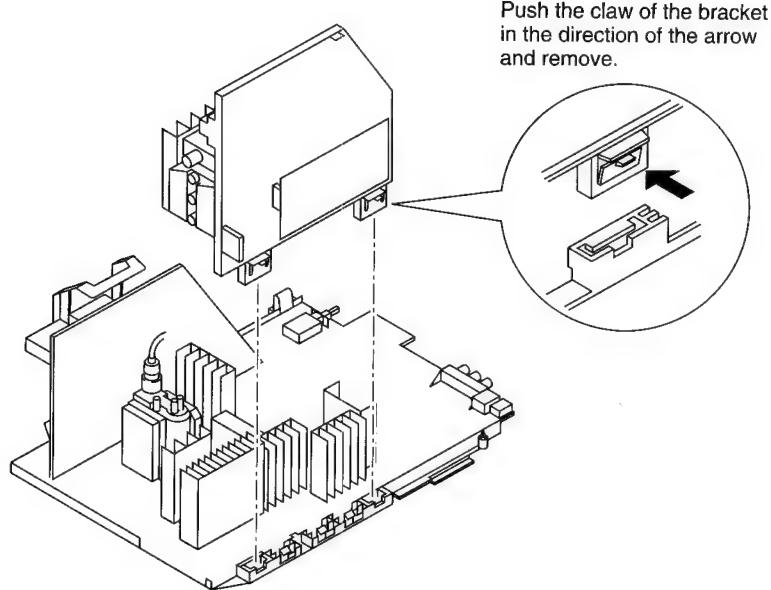
2-3. SERVICE POSITION



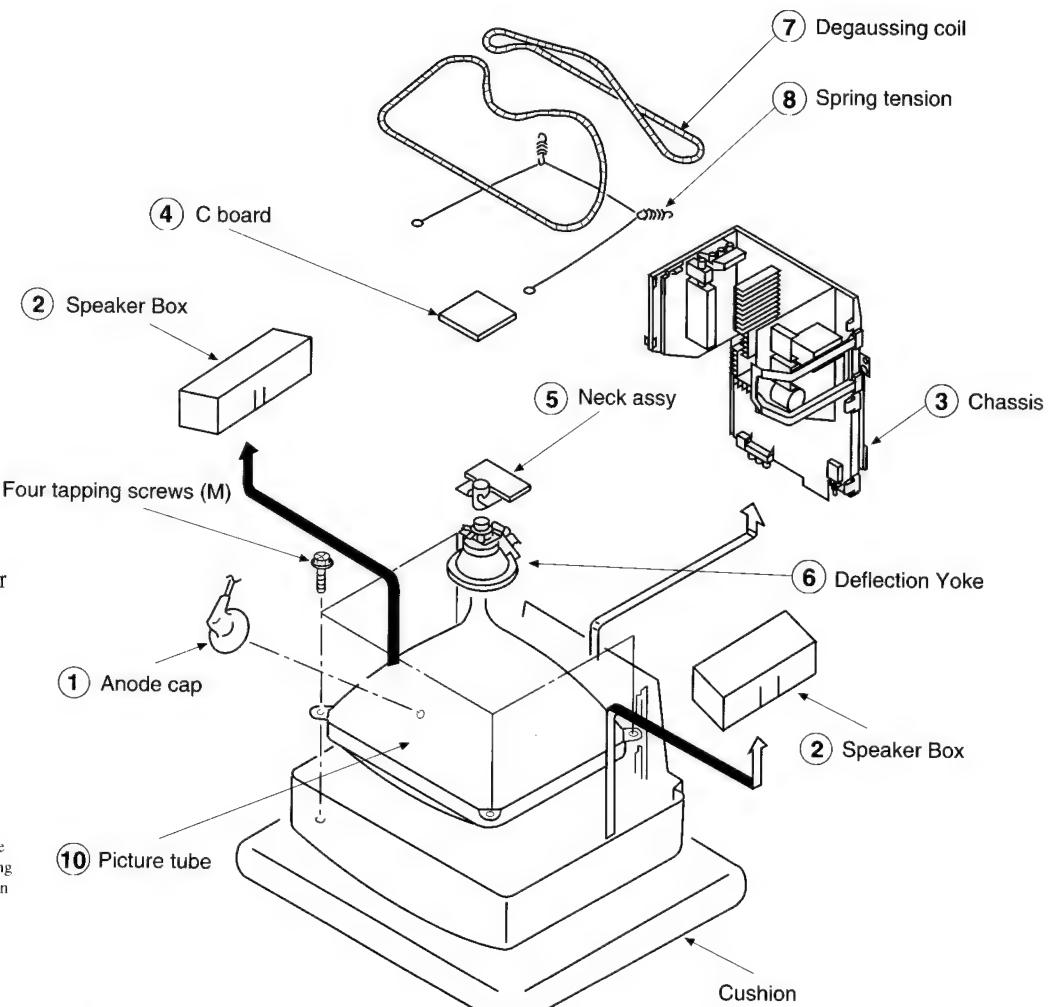
2-4. G BOARD REMOVAL



2-5. A BOARD REMOVAL



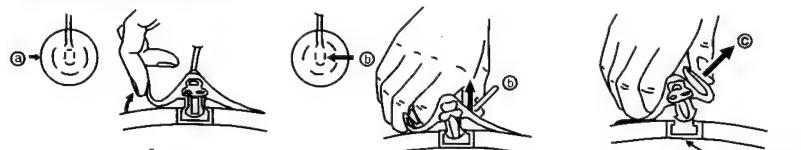
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

• REMOVING PROCEDURES.

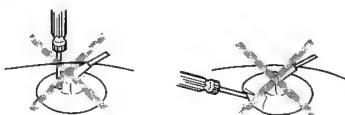


- ① Turn up one side of the rubber cap in the direction indicated by the arrow ②
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ③
- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③

• HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called a shatter-hook terminal is built into the rubber.
- ③ Don't turn the foot of rubber over hardly !

The shatter-hook terminal will stick out or damage the rubber.



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

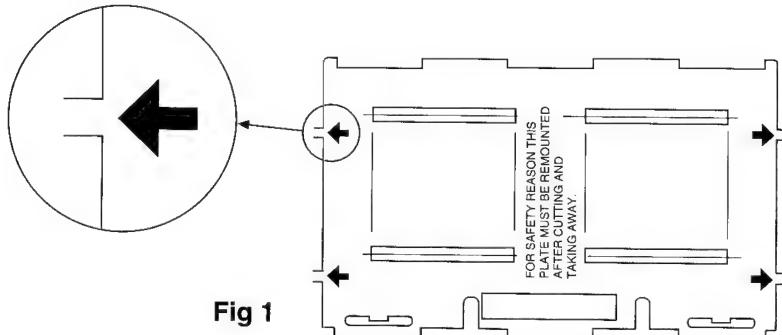


Fig 1

For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.

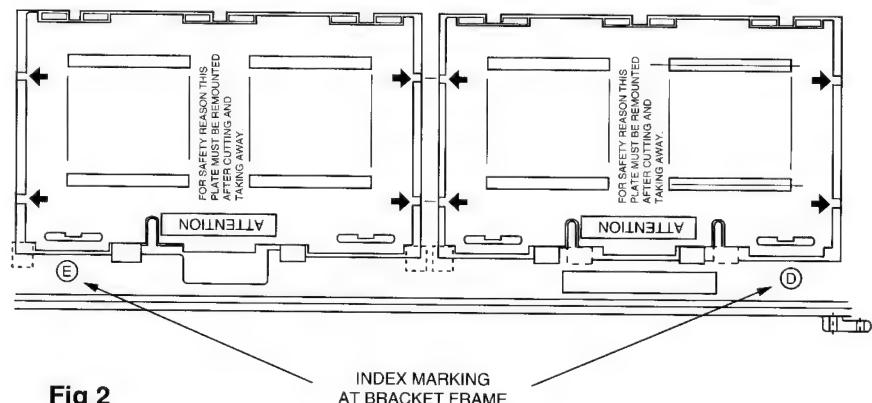
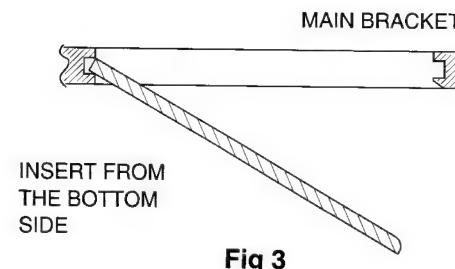


Fig 2



MAIN BRACKET
INSERT FROM
THE BOTTOM
SIDE

Fig 3

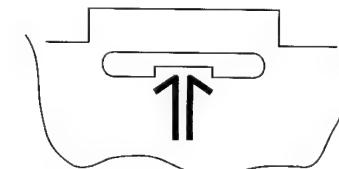


Fig 4

In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.

SECTION 3

SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustment with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches as follows.

Contrast normal
 Brightness normal

- Carry out the following adjustments in this order:

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. Vector scope

3-1. BEAM LANDING

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube face it in an easterly or westerly direction.
2. Switch on the set's power and degauss with the degausser.

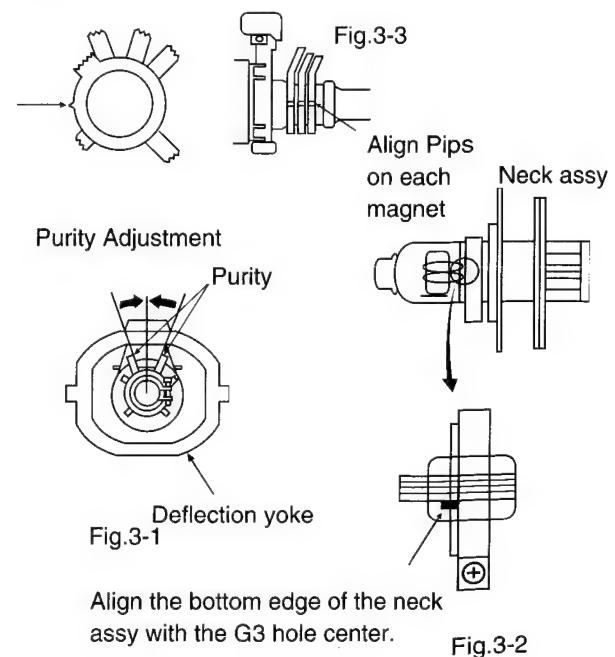
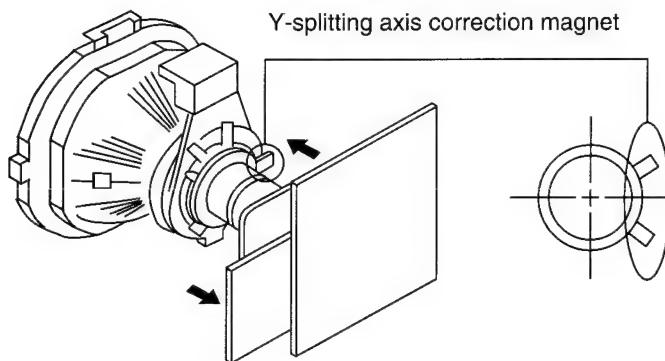
(1) Adjustment of Correction Magnet for Y-Splitting Axis

1. Input a crosshatch signal from the pattern generator.
2. Picture control is minimum and brightness control is still normal.
3. Position the neck assy as shown in Fig. 3-2.
4. Move the deflection yoke forward to touch the CRT and it stands up rightly.
5. Adjust the upper pin and the lower pin symmetrically by opening or closing the Y-splitting axis correction magnets on the neck assy.
6. Return the deflection yoke to its original position.

(2) Landing

Note: Before carrying out the following adjustments adjust the magnets as indicated below (See Fig. 3-3).

1. Input an all-white signal from the pattern generator. Maximize the picture setting and adjust the brightness setting.
2. Rough-adjust the focus and horizontal convergence.
3. Loosen the deflection yoke screws, align the purity adjustment knob to the central position. (See Fig. 3-1)
4. Switch from the all-white pattern to an all-green pattern.
5. Move the deflection yoke backwards and adjust with the purity magnet so that the green is at the center and it aligns symmetrically. (See Fig. 3-4)
6. Move the deflection yoke forward and adjust so that entire screen becomes green.
7. Switch the raster signal to red, then to blue and verify the landing condition.
8. When the position of the deflection yoke has been determined, fasten the deflection yoke with the screw.
9. If the beam does not land correctly in all the corners, use magnets to correct it. (See Fig. 3-5)



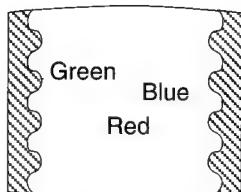


Fig.3-4

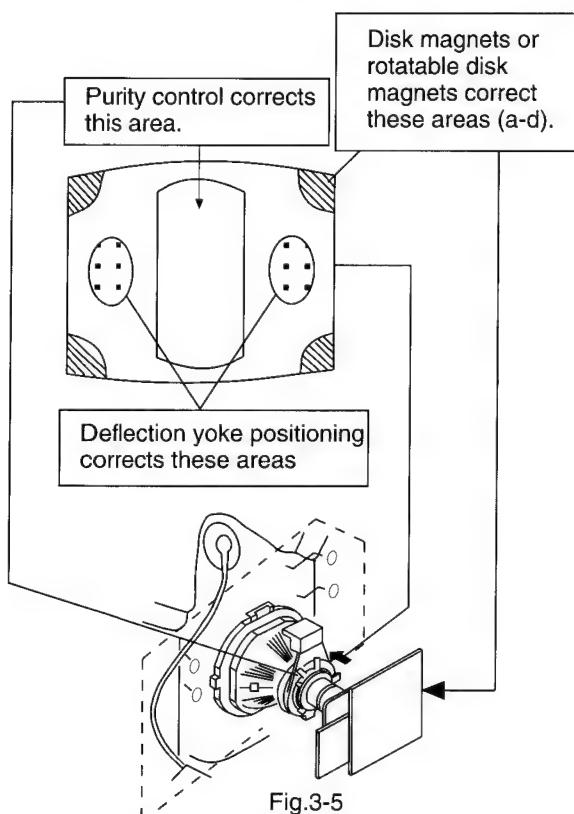
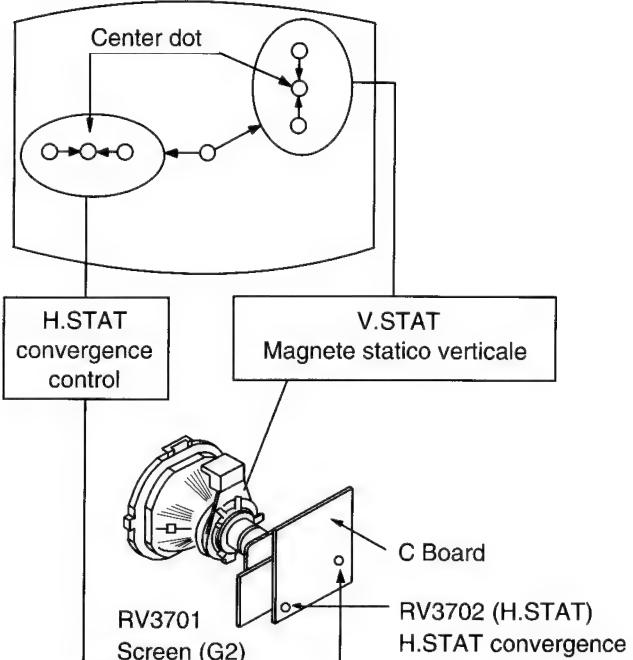


Fig.3-5

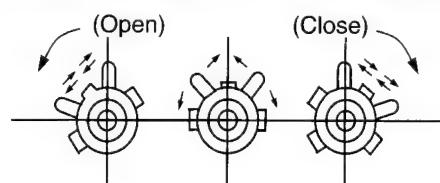
3-2. CONVERGENCE

(1) Screen center convergence (Static convergence)

1. Input a dot signal from the pattern generator. Normalize the picture setting.
2. (Moving horizontally), adjust the H.STAT control so that the horizontal red, green and blue dots coincide at the center of screen.
3. (Moving vertically), adjust the V.STAT magnet so that the vertical red, green and blue points coincide at the center of screen.

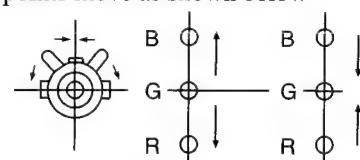


- If the horizontal dots are unable to coincide with the variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking. (Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)

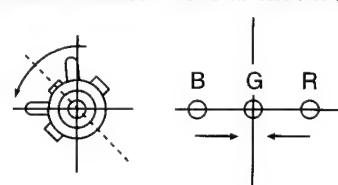


4. Movement of the red, green and blue dots by tilting the V.STAT magnet and by opening or closing the V.STAT magnet.

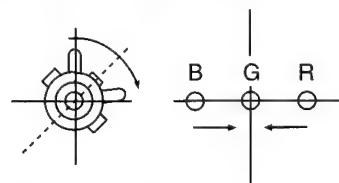
- ① By opening or closing the V.STAT magnet, the red, green and blue points move as shown below



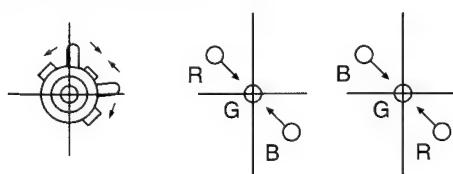
- ② By rotating the V. STAT magnet counterclockwise, the red, green and blue dots move as shown below.



③ By rotating the V.STAT magnet clockwise, the red, green and blue dots move as shown below.



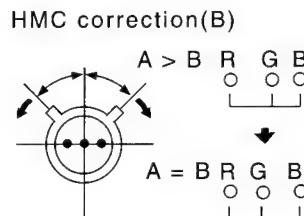
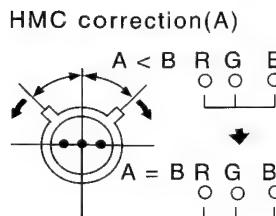
④ By opening or closing the V.STAT magnet, the red, green and blue dots move as shown below.



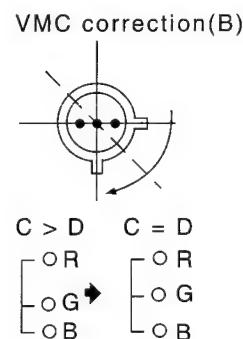
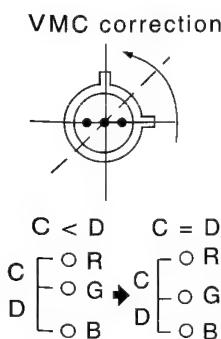
- If the blue dot does not coincide with the red and green points, correct the points by using the BMC (Hexapole) magnet.

⑤ Correction for HMC (horizontal mis-convergence) and VMC (vertical mis-convergence) by using the BMC (Hexapole) magnet.

① HMC correction by BMC (Hexapole) magnet and movement of the electronic beam.



② VMC correction by BMC (Hexapole) magnet and movement of the electronic beam.



Layout of each control

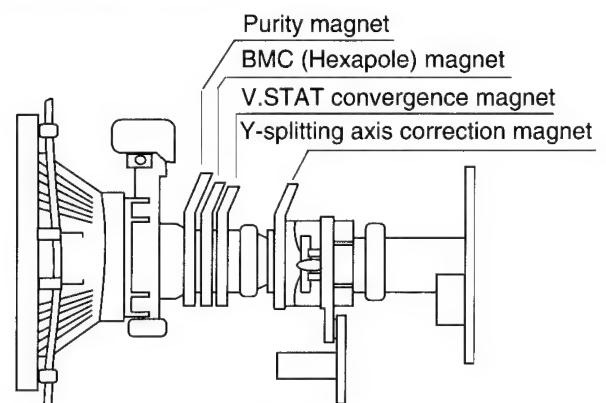
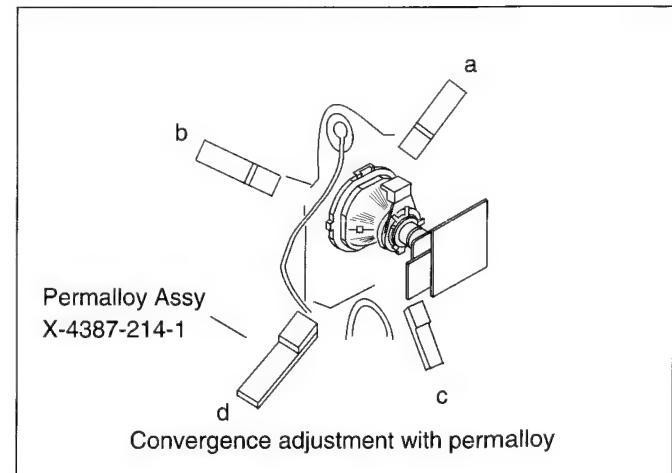
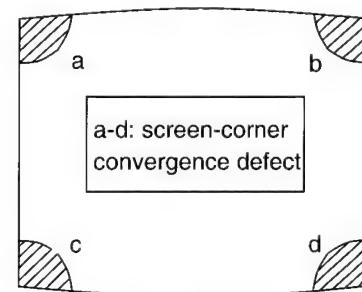


Fig.3-5

2. If you are unable to adjust the corner convergence properly, correct them with the use of permalloys.

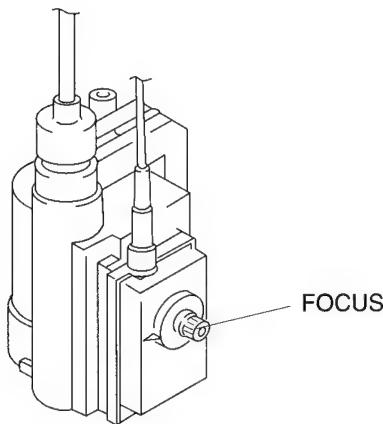


3-3. Focus

Video Proc. TDA4780

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control on the flyback transformer for the best focus at the center of the screen.

Bring only the center area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



3-4. Screen (G2), White balance (Adjustment in the service mode with remote commander)

G2 adjustment (RV3701)

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170V DC from an external power supply to the R, G and B cathodes of the CRT.
4. While watching the picture, adjust the G2 control RV3701 [SCREEN] on the C board to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into the Service Mode by pressing 'TEST', 'TEST' and 'MENU' on the Service Commander.
3. Select 'VIDEO PROC.' from the on screen menu display and press OK.
4. The 'VIDEO PROC TDA4780' menu will appear on the screen.

Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF

5. Set picture to MAX.
6. Set the 'R GAIN' to 25.
7. Adjust the 'G GAIN' and 'B GAIN' so that the white balance becomes optimum.
8. Press the OK button to write the data for each item.
9. Set picture to MIN.
10. Set the 'R LVL REF' to 31.
11. Adjust 'G LVL REF', and 'B LVL REF' with the left and right buttons so that the white balance becomes optimum.
12. Press the OK button to write the data for each item.

SECTION 4

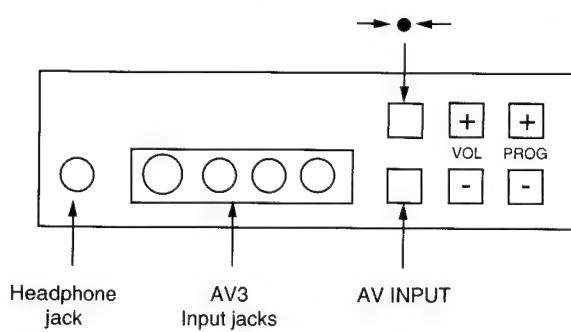
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-862.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing the PROG + (plus) and PROG - (minus) buttons on the front panel.



2. "TT" will appear on the upper right corner of the screen.
3. Press " MENU " on the commander to get the service menu on screen.

DEVICES	
Init TV	
Pip, Lumisponder & Autoside	
Sub Adjust	
Video Proc	TDA4780
Col Dec Main	TDA9144
Deflect. Cont	SDA9361
Col Dec Sub	TDA9143
Feature Box	S87C654
AI	TDA9170
DA	SDA9280
Single PIP	SDA9288
Sound	
Line23 det	

4. Push the joystick up (green) or down (blue) on the remote commander to select the adjustment item.
5. Press the center button to proceed to the next menu.
6. If the adjustment item is 'Video Proc.', push the down button to move to 'Video Proc.'
7. The Menu as indicated in Fig 4-3 will appear on the screen.
8. Move the joystick up or down to move to the adjustment item and press the center (OK) button.
9. Change the data in order to comply with each standard.

Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1 DIS	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

Fig. 4-3

SDA9361 (VIDEO PROC.)

Item No	Adjustment item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2*LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36 32" =
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36 32" =
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

Item No	Adjustment item	Data Amount
29	D/A	0
30	V BLK TIME	0
31	H BLK TIME	0
32	STAR V SCAN	0
33	H BLK PHASE	0
34	V SCAN WIDTH 0	0
35	V SCAN WIDTH 1	0
36	GUARD BAND	0
37	START RED SCAN	0
38	NUMBER FIELDS	1
39	NI NON INTERLACE	OFF
40	NR VSYNC NOISE RED	ON
41	SCC WITH VBL	ON
42	MIN LINES/FIELD	0
43	MAX LINES/FIELD	0
44	AFC EHT COMP	0
45	PLL FREQ	6
46	VCR	ON
47	GEN MOD	OFF
48	HSWID	ON
49	INT H PHASE	239
50	PWM WIDTH	0
51	NOISY VCR	OFF
52	KILLZIP	OFF
53	TC3RD	OFF
54	BANDGAP 4 OFF	OFF
55	BANDGAP OFF	OFF
56	BANDGAP	0

TDA4780 (VIDEO PROC.)

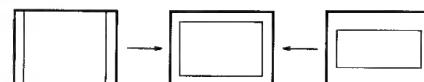
Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	25
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	0
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

DEFLECTION SYSTEM ADJUSTMENT

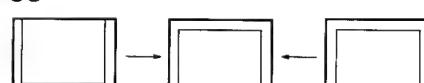
1. Enter into the service mode and select 'Deflect cont.'. The 'Deflect cont. SDA9361' adjustment menu will be displayed.
2. Select and adjust each item in order to get an optimum image.

Item No	Adjustment item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2 ¹ LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

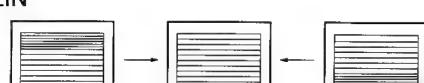
V SIZE



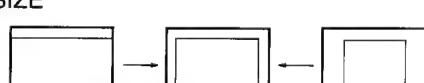
V POS



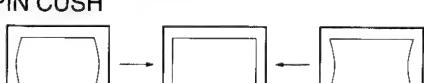
V LIN



H SIZE



H PIN CUSH



H TILT



H UP COR



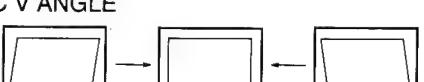
H LOWER COR



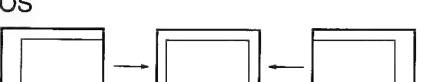
AFC V BOW



AFC V ANGLE



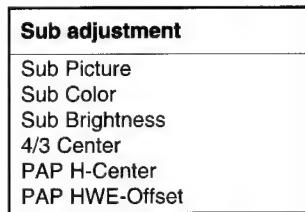
H POS



4-2. VOLUME ELECTRICAL ADJUSTMENTS

Sub Brightness Adjustment

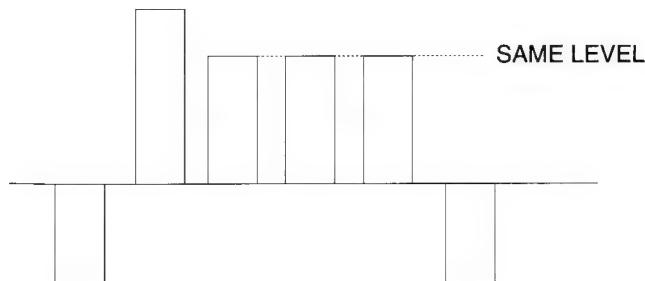
1. Enter Service Mode (Device Menu).
2. Select 'SUB ADJUST MENU'.



3. Adjust the value according to the following advice.

Sub Color Adjustment

1. Input a PAL color bar signal.
2. Connect an oscilloscope to CN3703.
3. Enter into 'SERVICE MODE'.
4. Choose 'SUB ADJUST'.
5. Enter into Sub Color mode.
6. Adjust data so that the right sides of the waveforms are of equal height.



4-3. TEST MODE 2:

Is available by pressing the Test button twice, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release Test Mode 2, press 0, 10, 20 ... twice or switch the TV into Standby Mode. Pressing the two Local Control buttons (+ and -) during Power ON will also switch into "TT" mode.

In TT mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear. The Function is kept even when the menu is not displayed!!

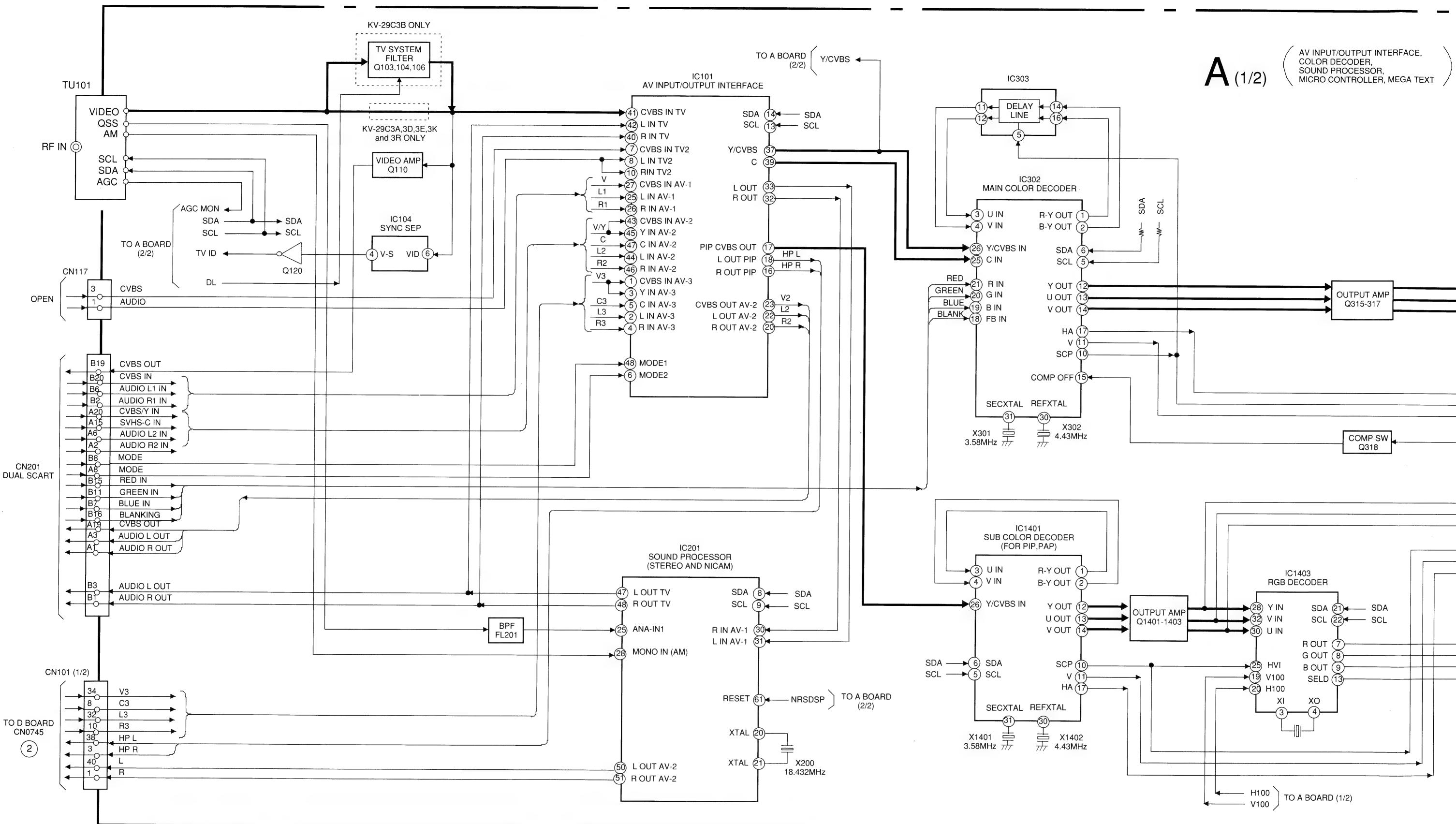
00	Switch back to normal mode - TT mode off	31	no function
01	Switch service menu on	32	no function
02	Direct access to Noise reduction	33	no function
03	Set volume to 30%	34	no function
04	Service menu in "Service Mode"	35	no function
05	Service menu in "Production Mode"	36	no function
06	Set Volume to 80%	37	no function
07	Aging Mode	38	Screen Position
08	Shipping Condition	39	Reset Programme Table
09	Language Reset	40	See TT10
10	The TT number will be deleted	41	Picture Min
11	Direct access to Balance	42	no function
12	Direct access to Hue	43	no function
13	Display of TV set configuration	44	no function
14	Production Info Display	45	Set NVM to Protect mode
15	Read Analog from ROM	46	IR Channel Presetting Mode. The channel presetting can be done by a Special transmitter. Sequence: TT46 -> --PR Number select display appears Select Prog. No. from where the channel shall be stored. --> Now TV is waiting for IR sequence --> --> If no IR transmission starts TT46 is released after 20 secs -->! Note: when TT46 is active, any transmission will be interpreted as PROG data !
16	Save Analog F in NVM		
17	This function presets the Labels for the AV sources: AV1, RGB, AV2, YC2, AV3, YC3, AV4, YC4.		
18	No function		
19	No function		
20	See TT10		
21	Picture Rotation automatic function: (-4) -> (+4) -> 0	47	no function
22	Error Monitor Display	48	no function
23	Direct access to Sub Brightness Adjustment.	49	New Initialize
24	Direct access to Sub Colour.	50	See TT10
25	Status Menu Display	51	Strobo mode is activated.
26	Text Character selection (Char set 06 -> West Europe)	52	no function
27	Text Character selection (Char set 38 -> East Europe)	53	no function
28	Text Character selection (Char set 40 -> West Europe) US English	54	Direct access to Velocity Modulation VM (Production use)
29	Text Character selection (Char set 55 -> West Europe) Turkish	55	Slicer High
30	See TT10	56	Slicer No
		57	Megatext Service Menu on
		58	MTX Small Framing Code Window

59	MTX Wide Framing Code Window
60	See TT10
61	no function
62	no function
63	no function
64	Reset all IIC Slave commands (Production use)
65	Reset stored error codes in NVM
66	Feature box and Pal Plus
67	no function
68	Ignore Errors - on
69	Ignore errors - off
70	See TT10
71	no function
72	no function
73	Megatext RGB textlevel one step decreased.
74	Megatext RGB textlevel one step decreased (max 1 steps down starting from E0h) (Production use)
75	no function
76	CDA9360
77	SDA9280
78	PIP
79	no function
80	See TT10
81	S87C654 Default data setting
82	TDA9170 Default data setting
83	SAA 7185WP Default data setting
84	TDA4780 Default data setting
85	TDA9144 Default data setting
86	TDA9143 Default data setting
87	SDA9288 Default data setting
88	Char set Russian
89	Char set Russian (esc)
90	See TT10

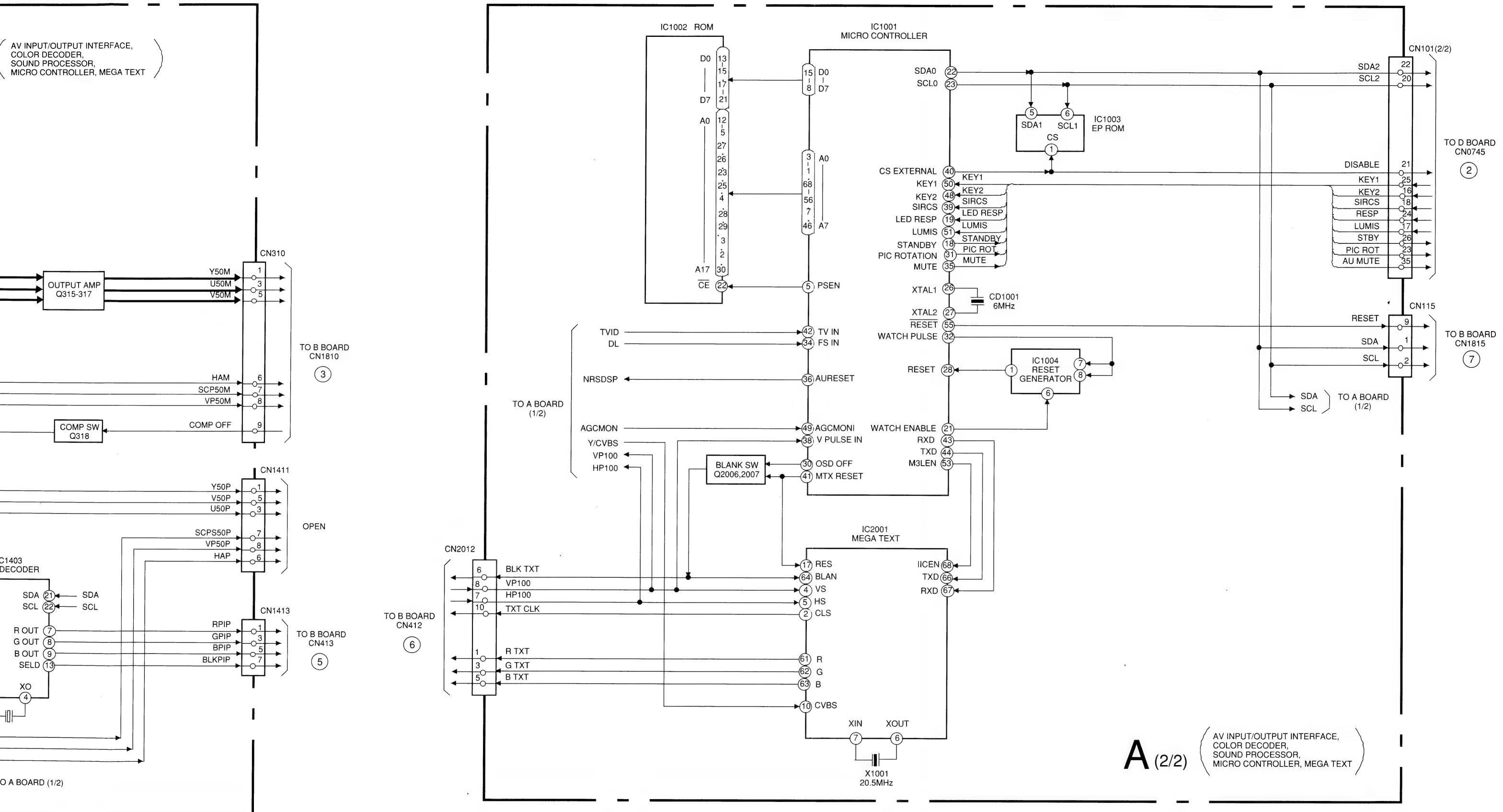
SECTION 5

DIAGRAMS

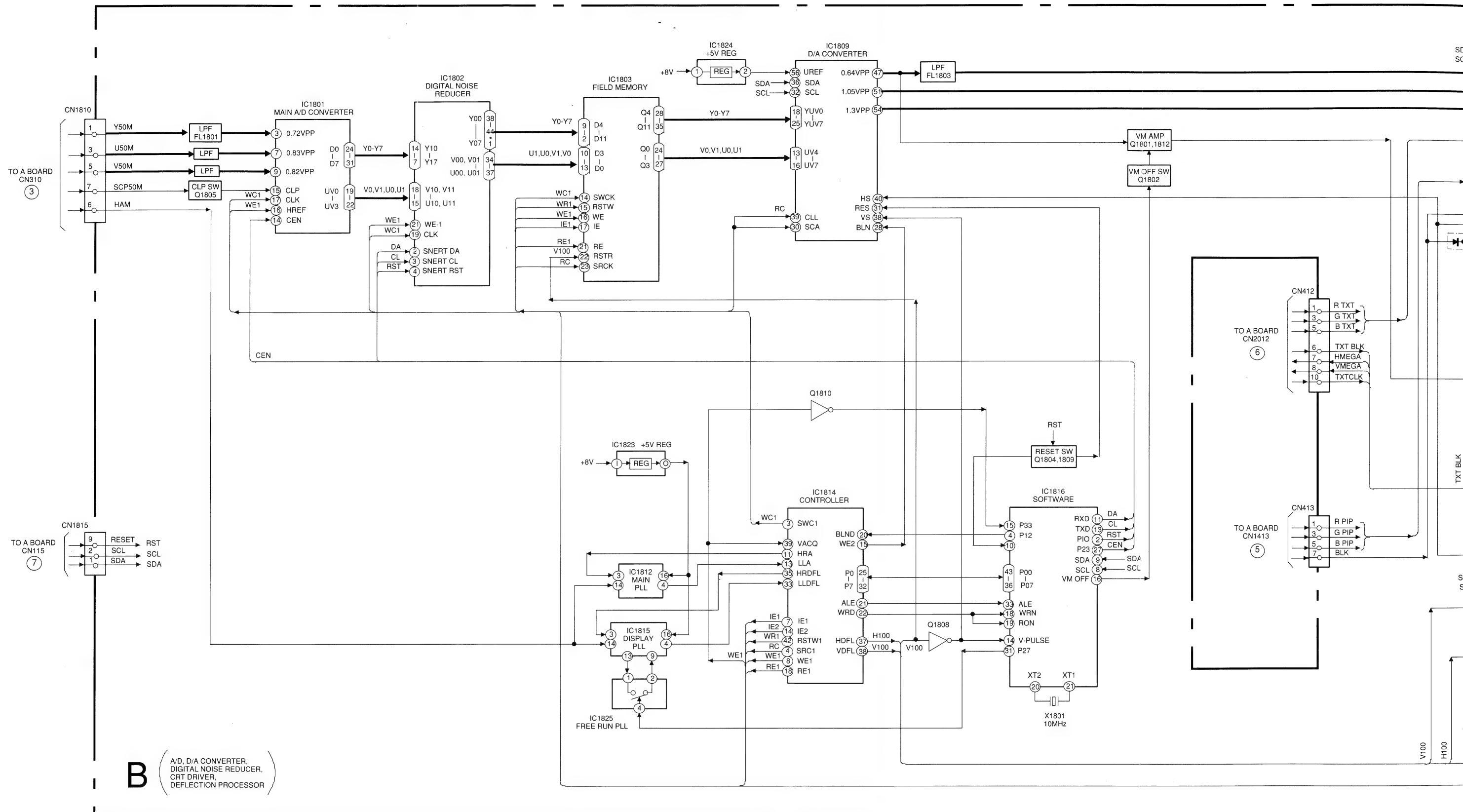
BLOCK DIAGRAM (1)

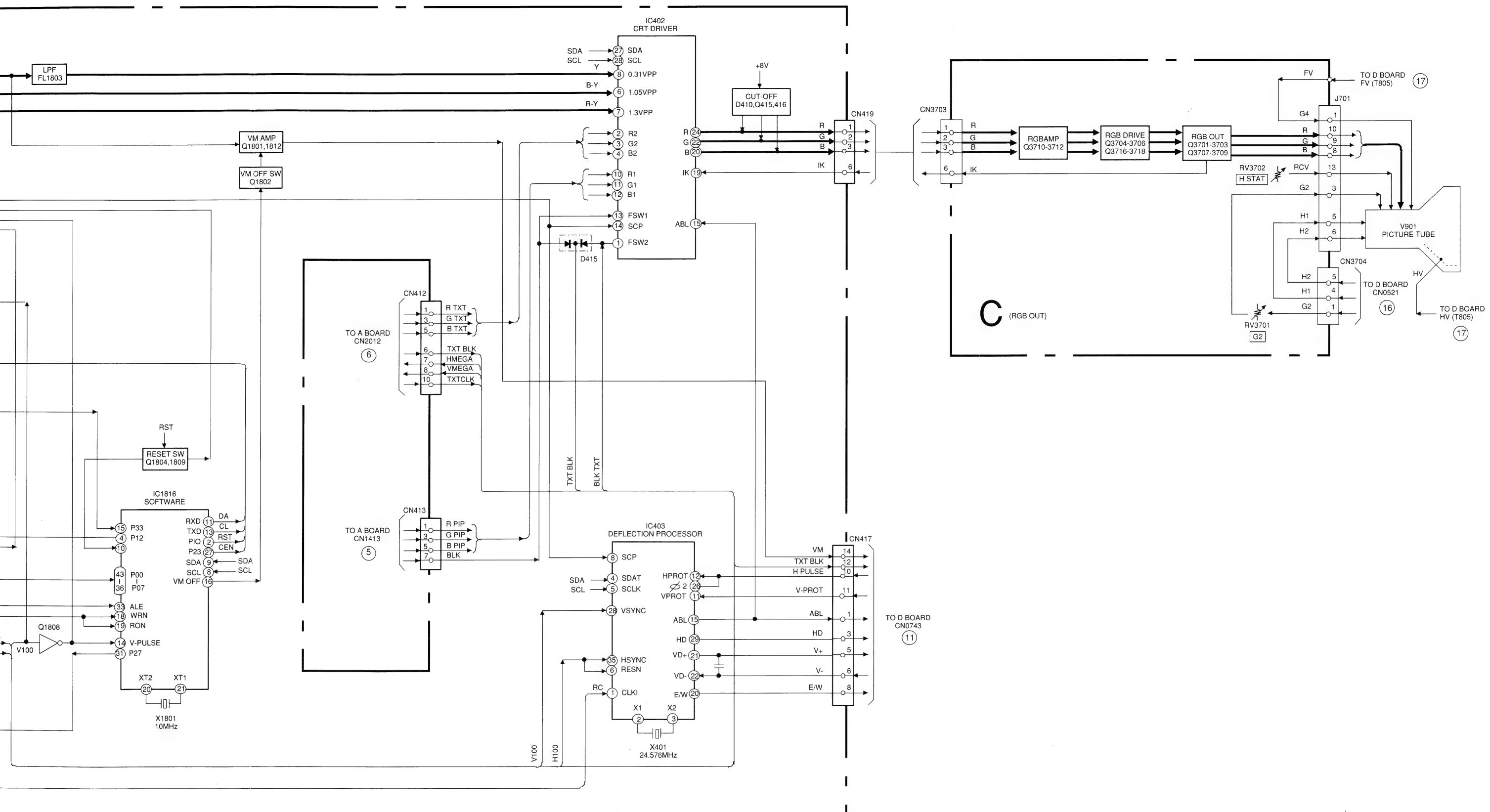


BLOCK DIAGRAM (2)

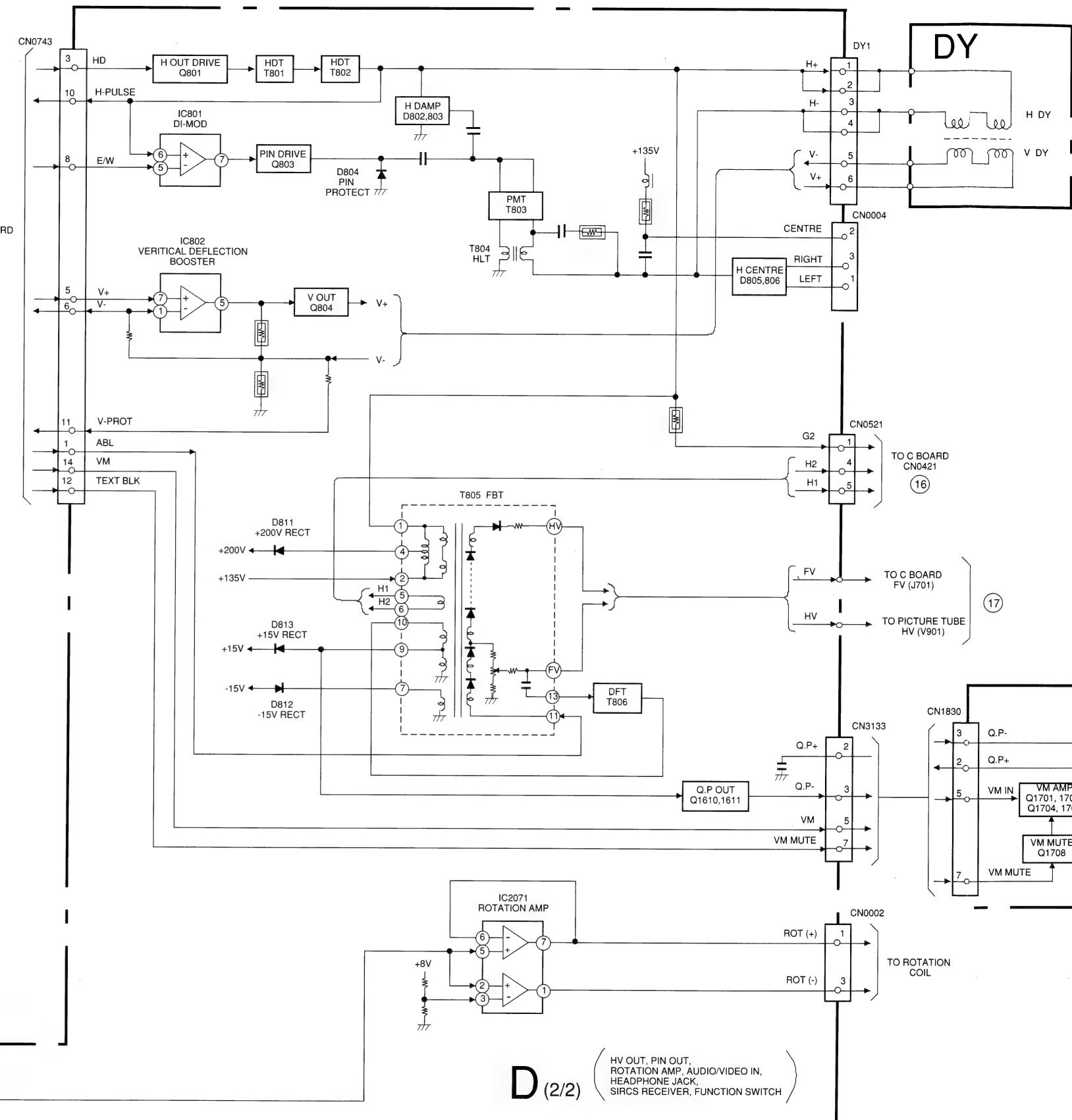
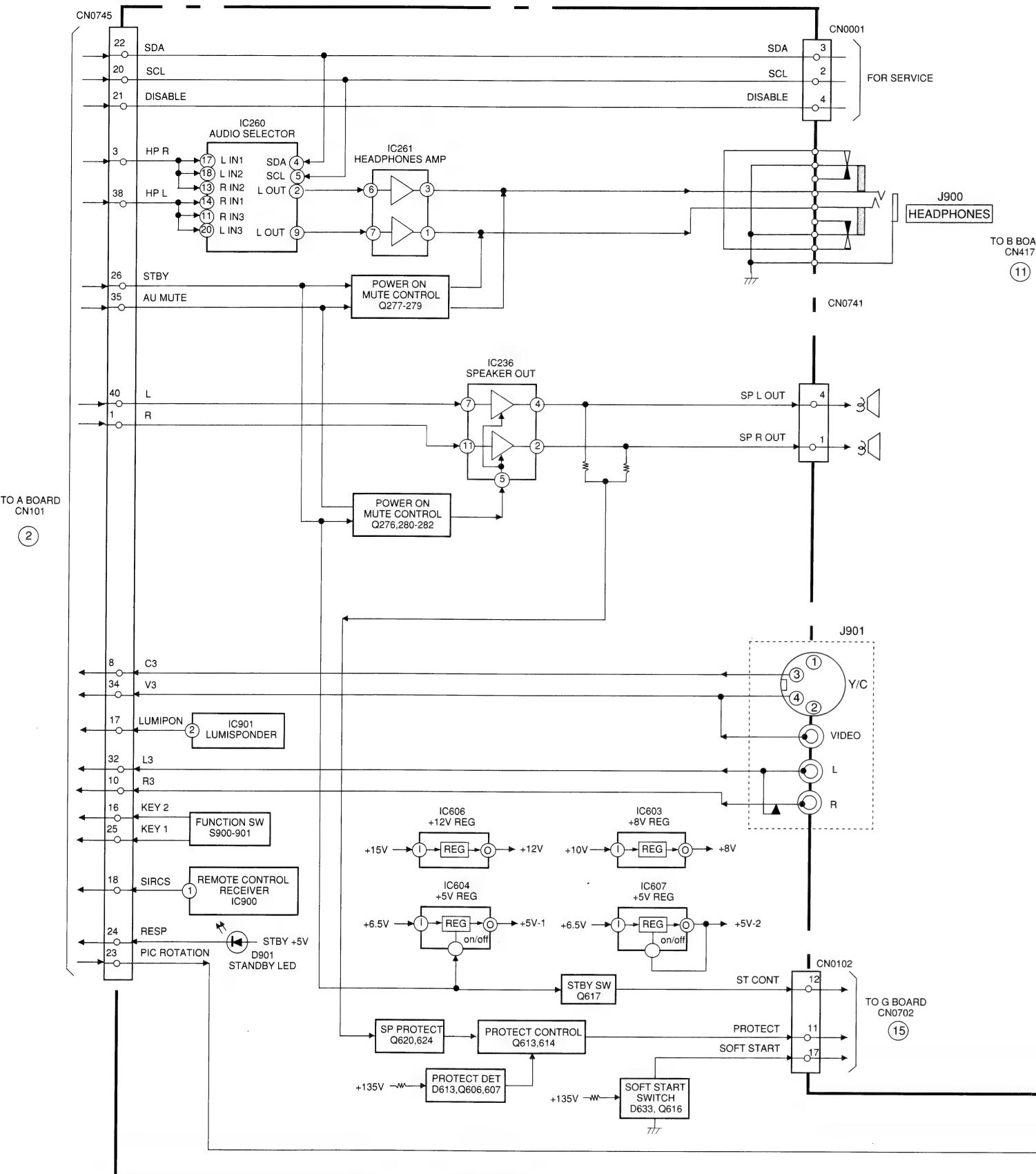


BLOCK DIAGRAM (3)

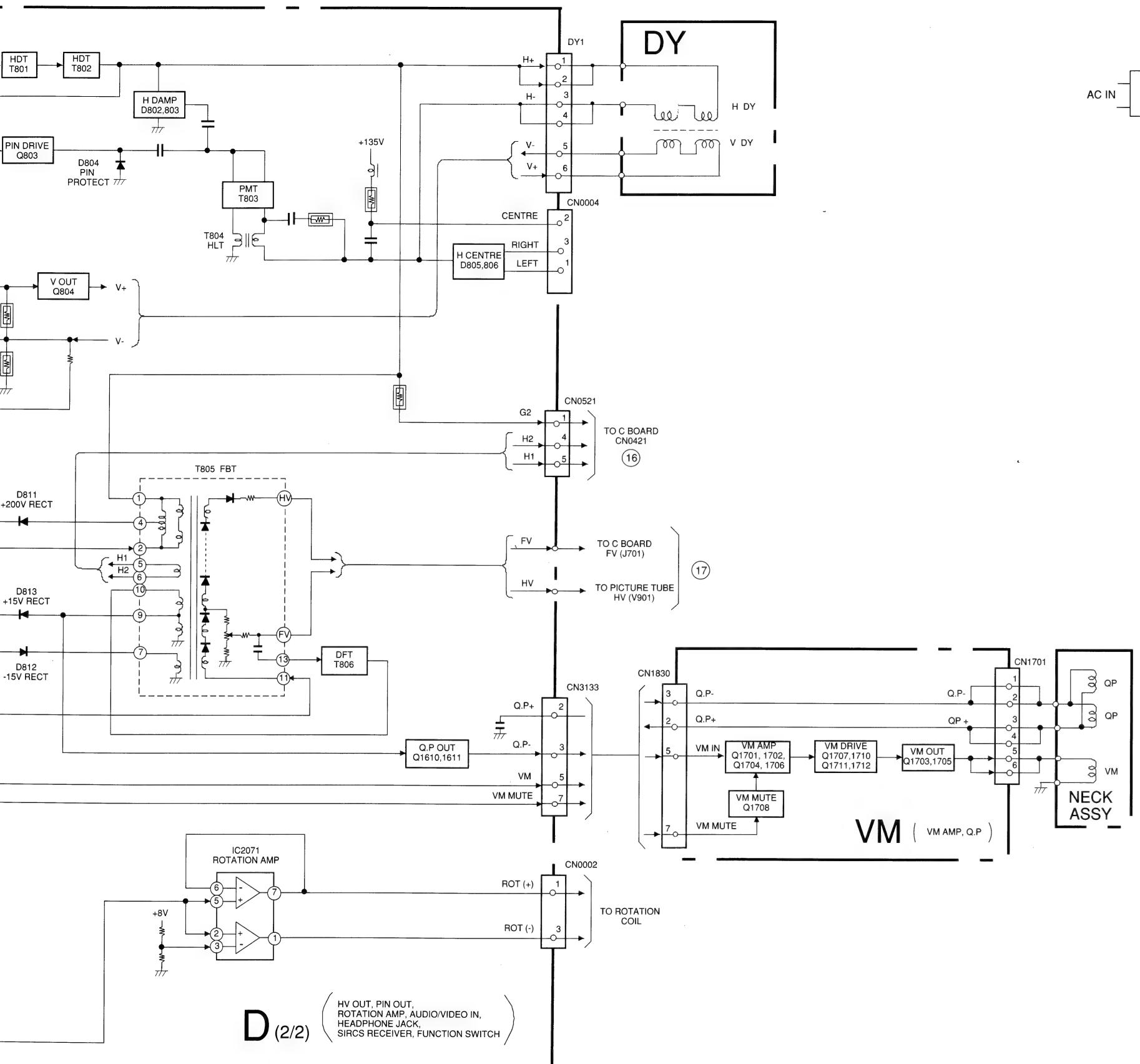




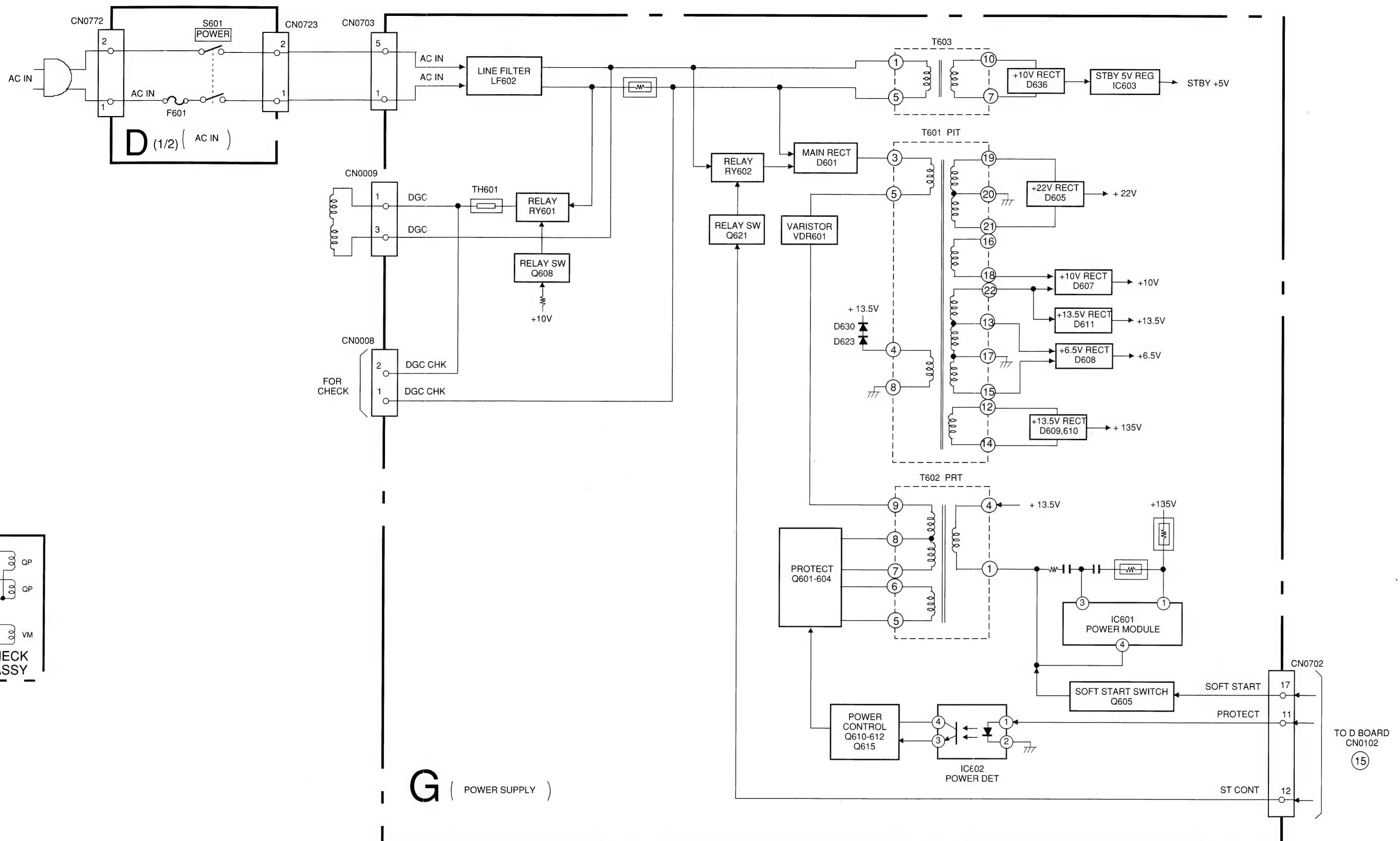
BLOCK DIAGRAM (4)



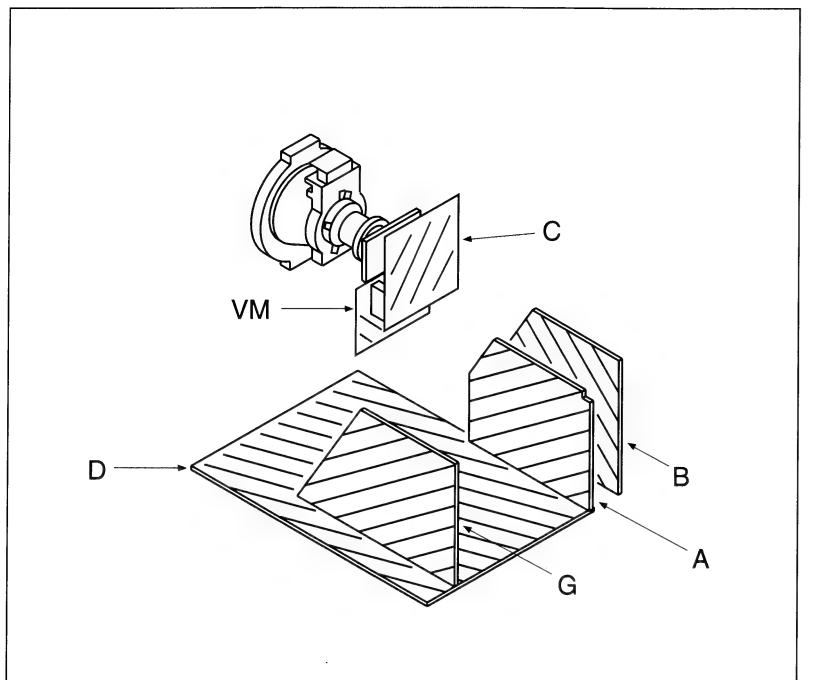
BLOCK DIAGRAM (5)



BLOCK DIAGRAM (5)



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
 $k = 1000$, $M = 1000\text{K}$
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power $\frac{1}{4}$ W

-  : nonflammable resistor.
-  : internal component.
-  : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : earth - ground.
-  : earth - chassis.
-  : no mounted

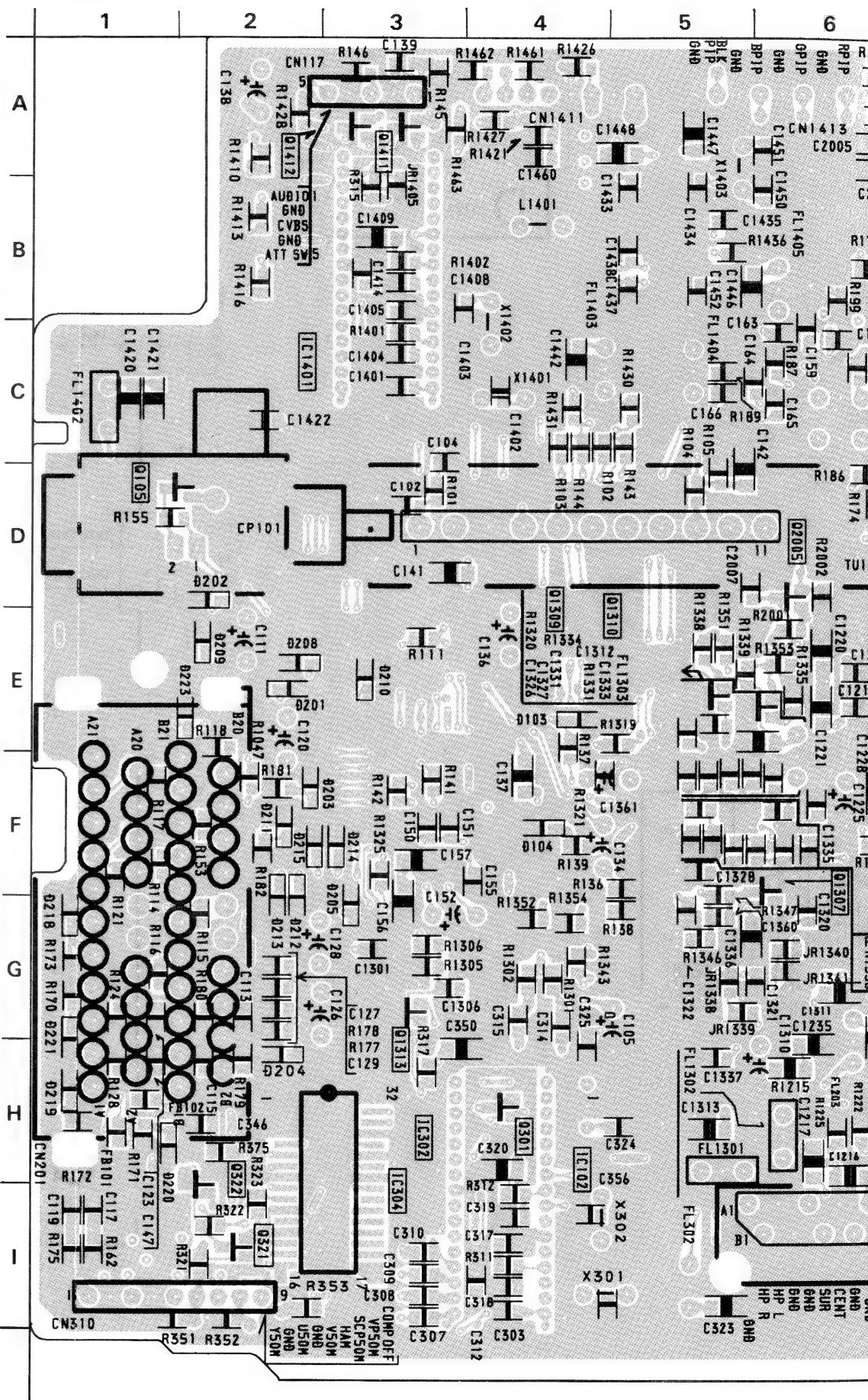
Note : The components identified by shading and marked  are critical for safety. Replace only with the part number specified.

Note : Les composants identifiés par une trame et une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

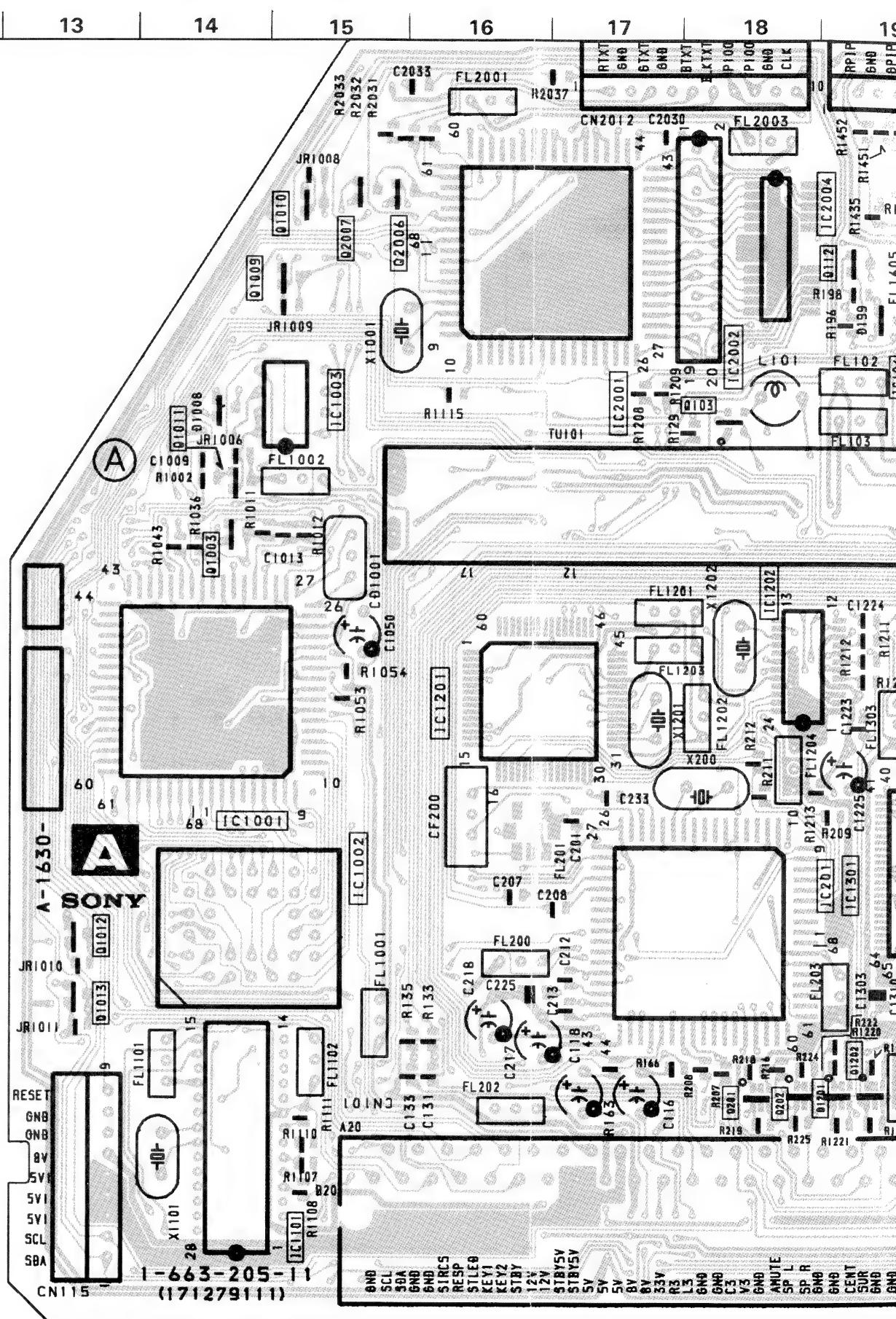
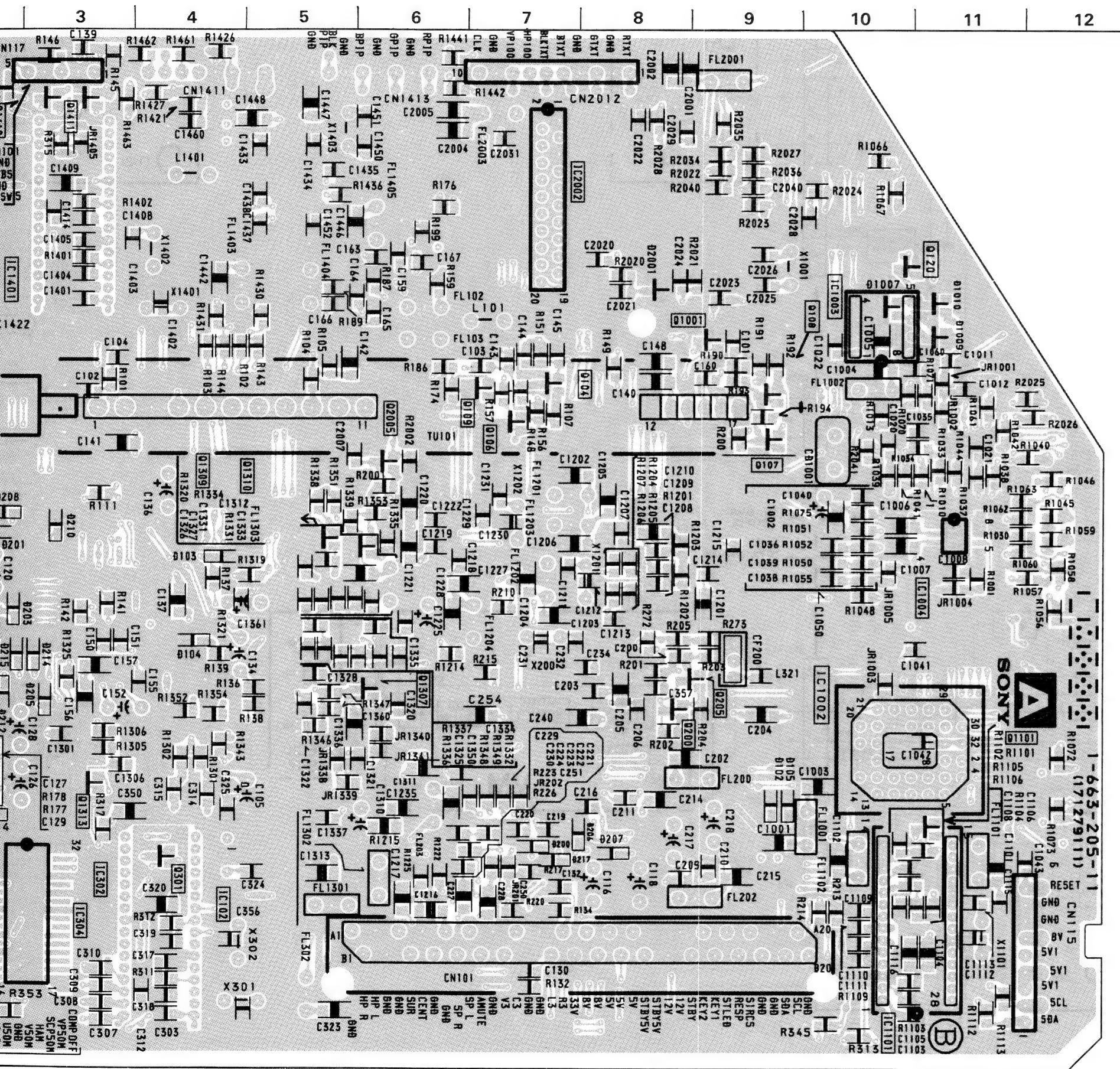
BOARD

IC		Q1404	B-21
01	E-22	Q1411	A-3
02	H-4	Q1412	A-2
04	C-19	Q2005	D-6
01	G-19	Q2006	B-15
02	H-3	Q2007	B-15
03	I-22	DIODE	
001	F-14	D102	G-9
002	G-10	D103	E-4
003	C-10	D104	F-4
004	E-11	D105	G-9
401	C-2	D199	C-19
403	B-21	D200	H-7
001	C-17	D201	E-2
TRANSISTOR		D202	D-2
02	E-23	D203	F-3
03	C-18	D204	H-2
04	D-8	D205	F-3
06	D-7	D206	H-8
07	D-9	D207	H-8
08	C-10	D208	E-2
09	D-7	D209	E-2
0	E-22	D210	E-3
2	B-19	D211	F-2
0	C-11	D212	G-2
0	G-8	D213	G-2
5	F-9	D214	F-3
1	H-4	D215	F-2
2	I-22	D217	H-7
5	H-23	D218	G-1
6	I-24	D219	H-1
7	I-24	D220	H-1
8	H-22	D221	G-1
01	C-9	D223	E-2
01	H-22	D301	H-22
05	G-21	D1007	C-10
11	G-22	D1008	C-14
12	F-22	D1009	C-11
01	A-23	D1010	C-11
02	B-23	D1405	B-21
03	B-23	D2001	C-8

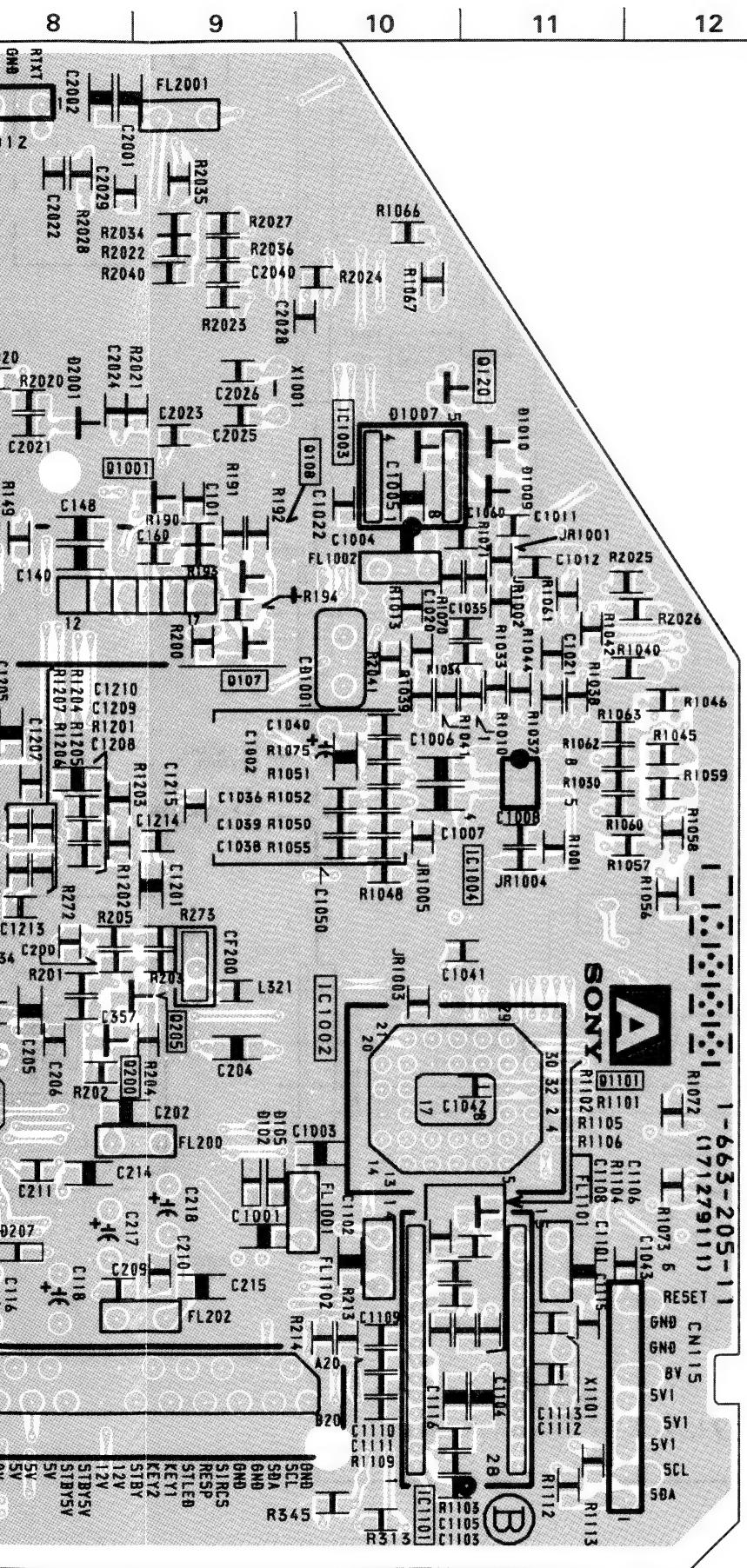
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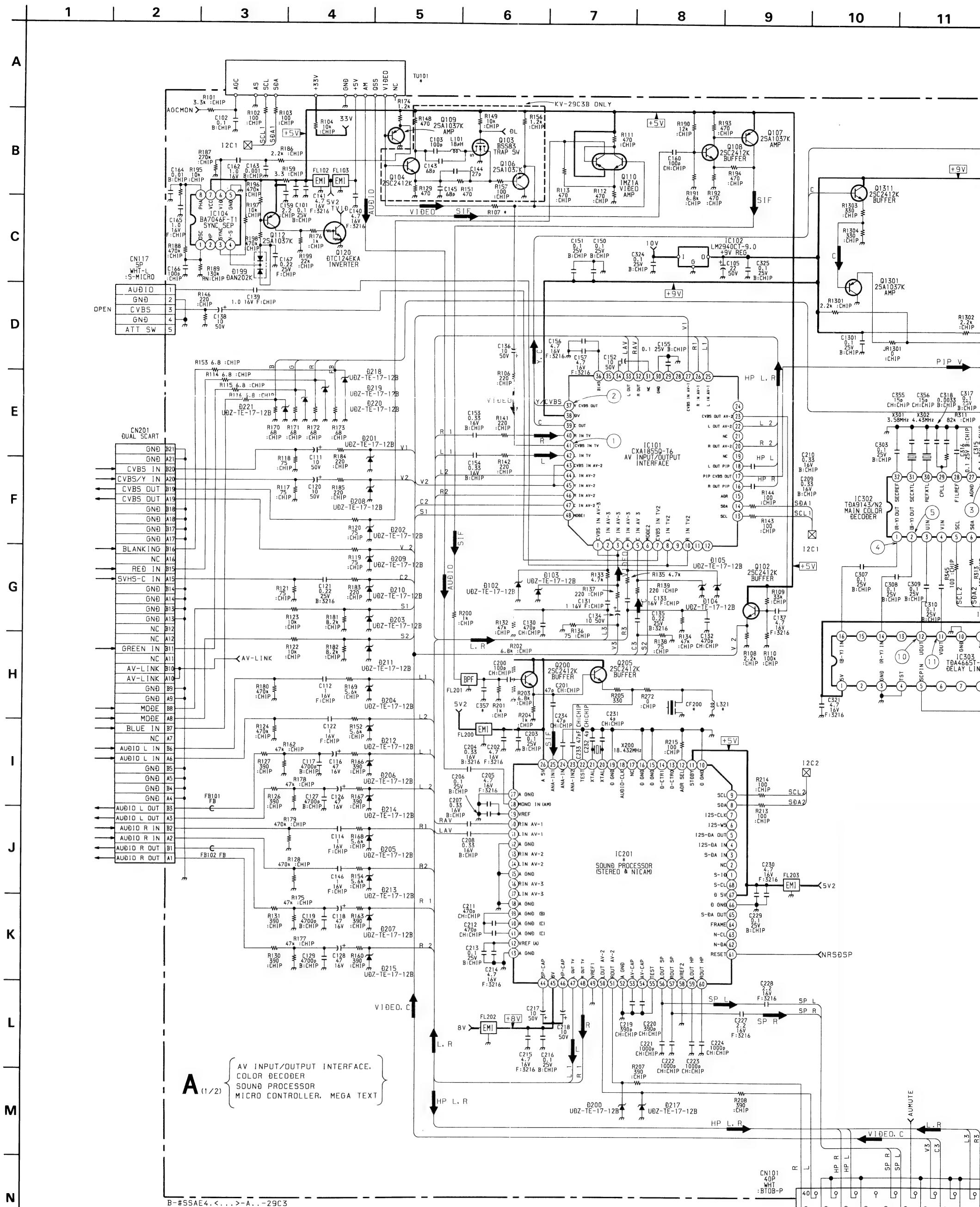


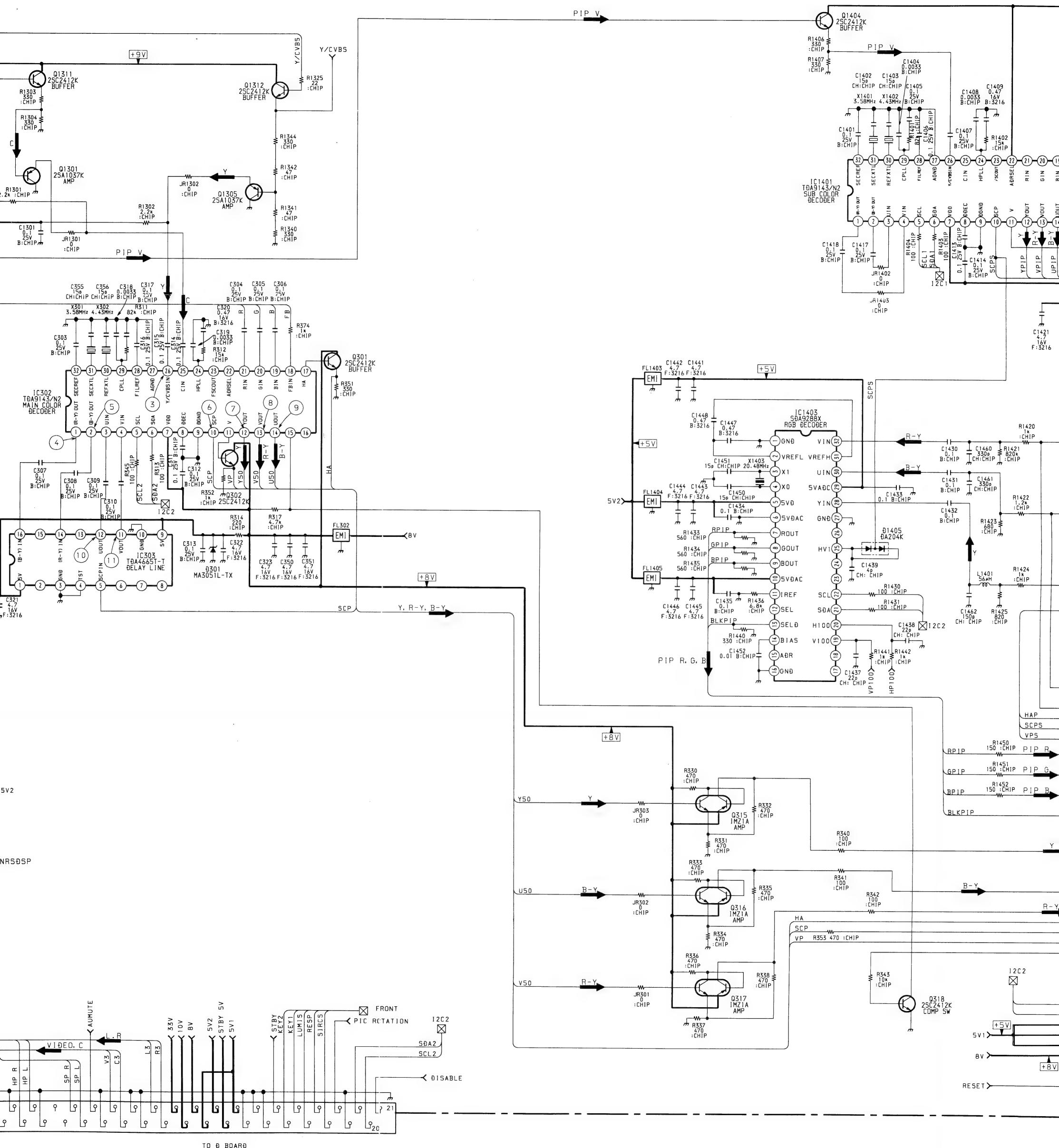
A Board < Component Side >

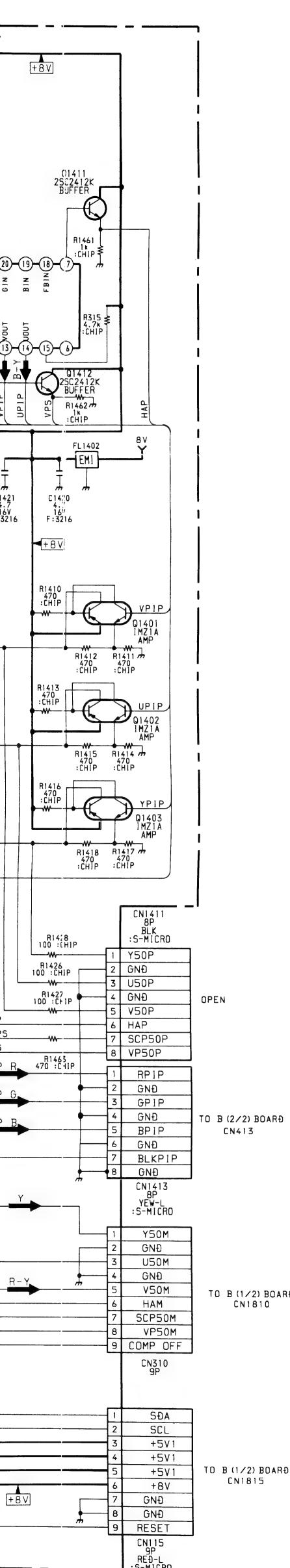


A Board < Component Side >









A (1/2) BOARD TRANSISTOR VOLTAGE TABLE

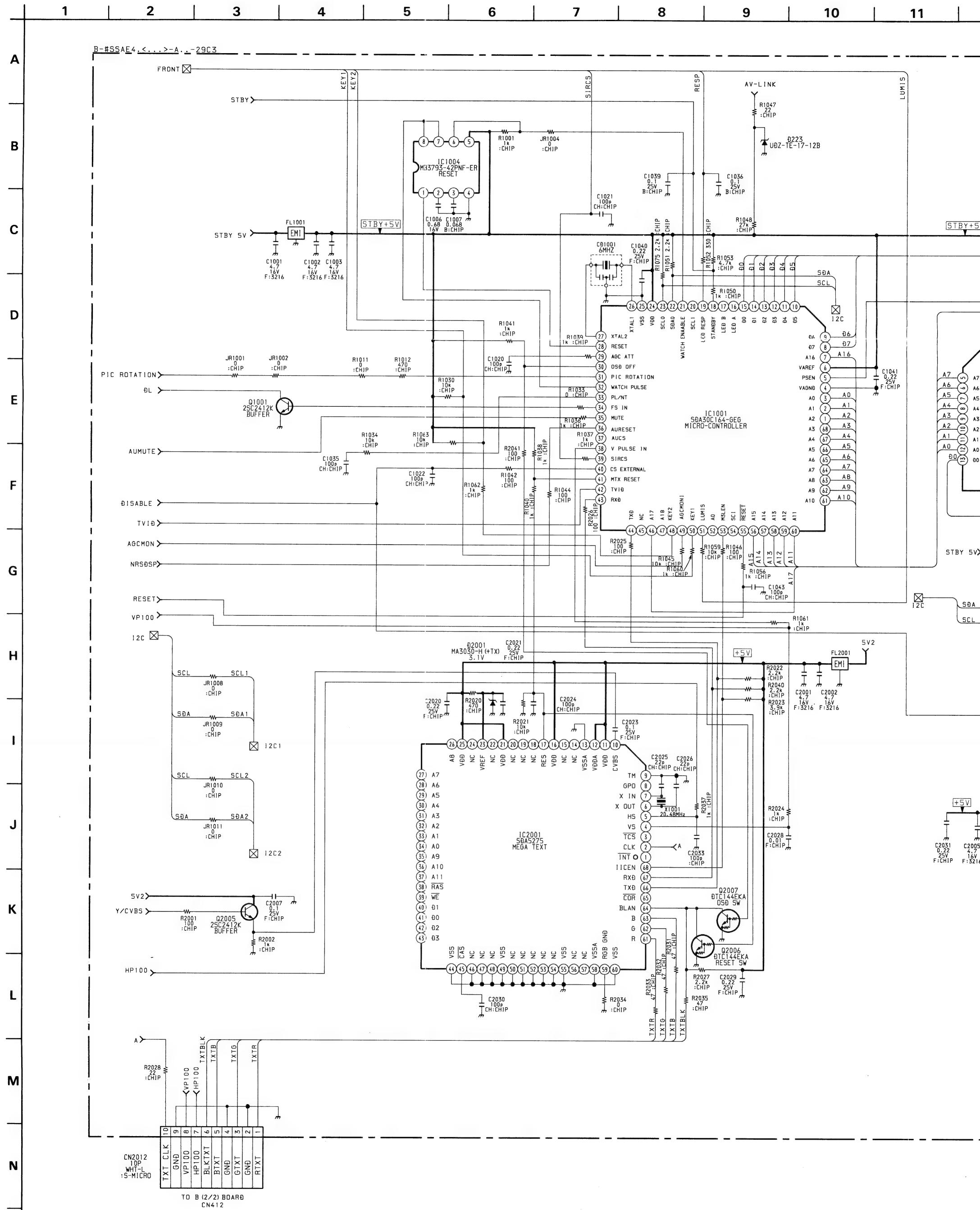
Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q102	1.9	4.7	1.3
Q105	0.08	4.5	0.08
Q107	4.4	1.7	5.0
Q108	1.8	4.4	1.2
Q112	4.3	4.9	5.0
Q120	4.6	0.1	0.1
Q301	0.5	8.0	0.4
Q302	-	8.0	0.3
Q318	0.1	5.2	0.1
Q1201	8.6	5.0	9.2
Q1202	0.7	5.0	9.2
Q1301	1.9	-	0.2
Q1302	-	-	0.6
Q1303	0.8	-	1.5
Q1304	2.2	-	0.1
Q1305	2.0	-	0.1
Q1306	1.7	-	-
Q1307	-	3.4	0.1
Q1308	3.5	4.7	2.9
Q1309	0.9	0.1	1.6
Q1310	1.0	0.1	1.6
Q1311	4.5	9.0	3.9
Q1312	4.5	9.0	-
Q1313	4.6	0.7	0.1
Q1314	4.8	4.7	4.3
Q1404	4.5	7.8	3.8
Q1411	0.5	8.0	0.6
Q1412	0.1	8.0	0.1
Q1201	2.6	8.6	2.1
Q1202	2.6	8.6	2.1

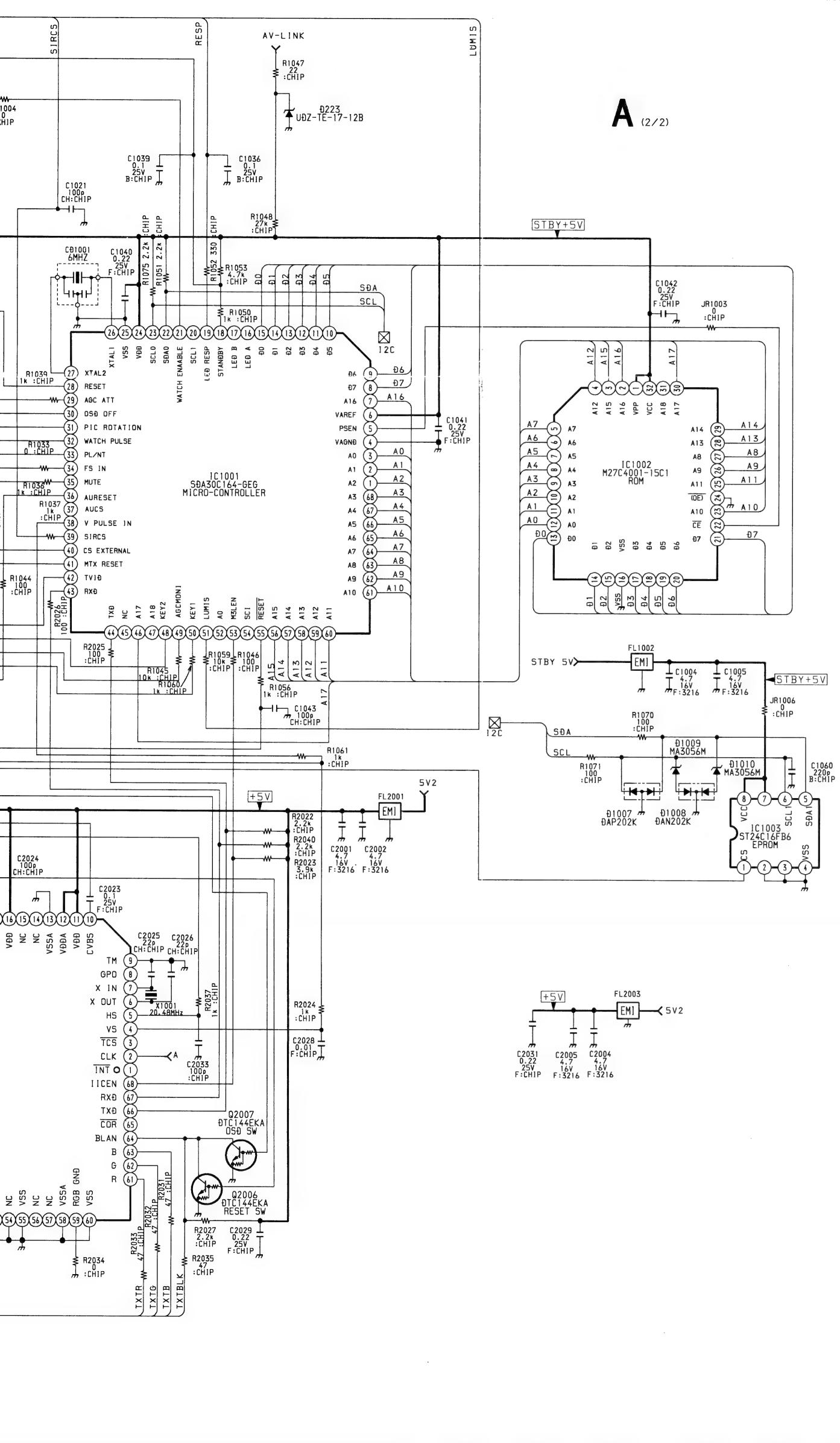
A (1/2) BOARD IC VOLTAGE TABLE

IC Voltage Table					
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC201	4	0.5	IC1201	4	4.7
	5-6	4.7		13	4.7
	7	2.4		31	4.7
	8-9	4.7		35	4.7
	20	2.4		37	2.7
	24	4.4		39	2.2
	25	8.8		40	2.7
	26	4.4		41	4.7
	28	3.8		45	4.8
	29	2.7		29	2.7
	30-31	3.8		30-31	3.8
	39-42	3.8		39-42	3.8
	44	6.2		44	6.2
	45	8.0		45	8.0
	46	7.0	IC 303	1	5.0
	47-48	3.8		5	0.6
	50-51	3.7		11-12	3.0
	53-54	3.8		14	1.4
	56-57	1.2		16	1.2
	61	4.8		1-2	2.0
IC302	1-2	2.0	IC1401	3-4	2.4
	3-4	2.4		5	3.5
	5	3.0		6	4.0
	6	4.0		7	7.8
	7	8.0		8	5.0
	8	5.0		10	0.8
	10	0.5		12	2.4
	12	3.2		13-14	2.6
	13-14	2.6		15	8.0
	15	8.0		17	0.3
	17	0.3		22	7.8
	19	1.6		24	3.6
	21	1.0		26	3.3
	23-24	4.0		28	3.5
	26	3.7		29	4.3
	28	3.5		30	2.6
	29	5.0		31	2.6
	30	2.5		32	3.8
	31	2.5			
	32	2.0			

A BSAPP TRADE MARK

Model Ref. No.	29C3A	29C3B	29C3D	29C3E	29C3K	29C3R
C357	39PF	39PF	39PF	—	39PF	39PF
CF200	6.5MHz	6.5MHz	6.5MHz	—	6.5MHz	6.5MHz
IC201	MSP3400C-PP-C6-T-ND	MSP34103-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3410B-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3400C-PP-C6-T-ND
L321	10UH	10UH	10UH	—	10UH	10UH
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)





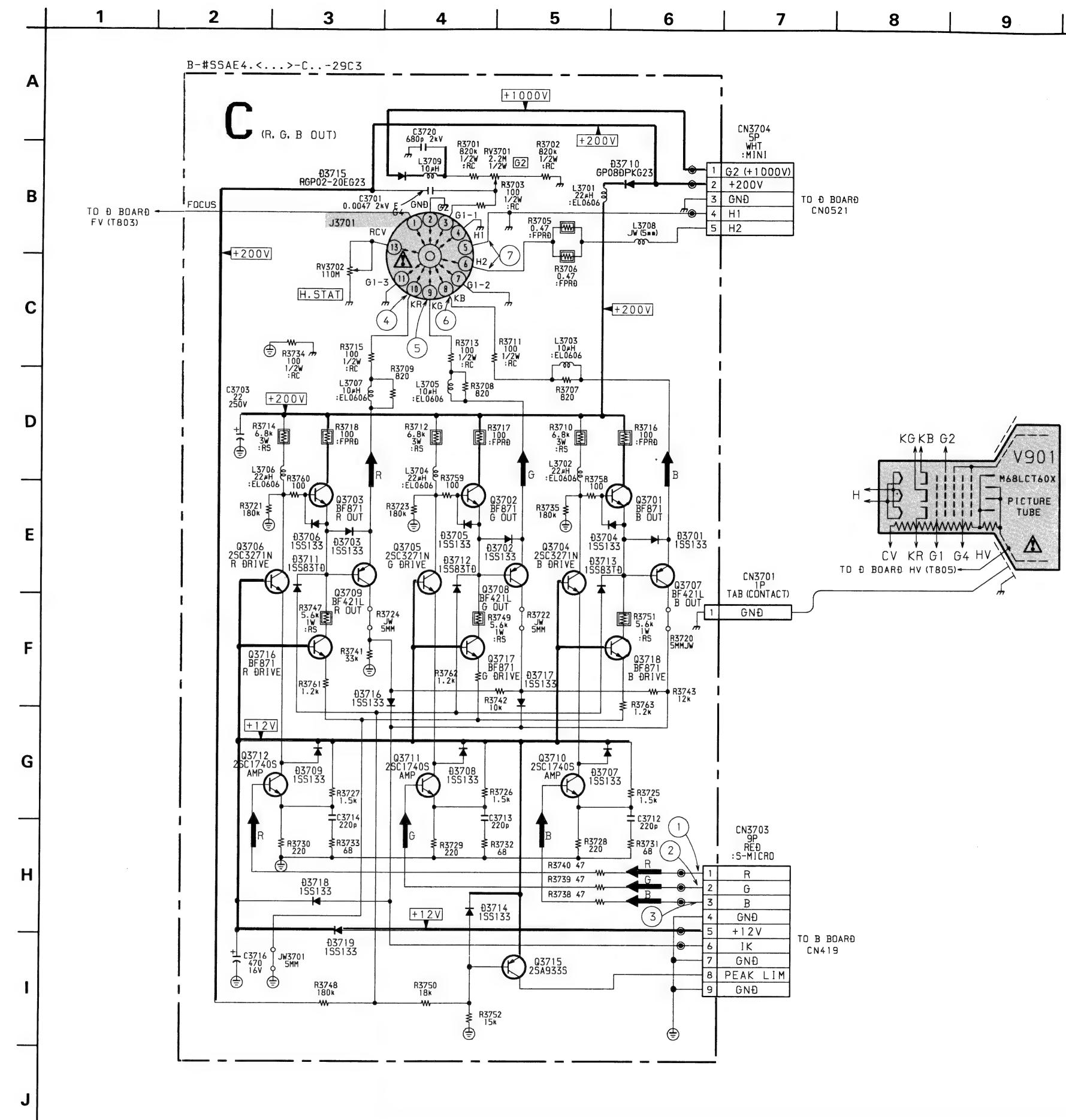
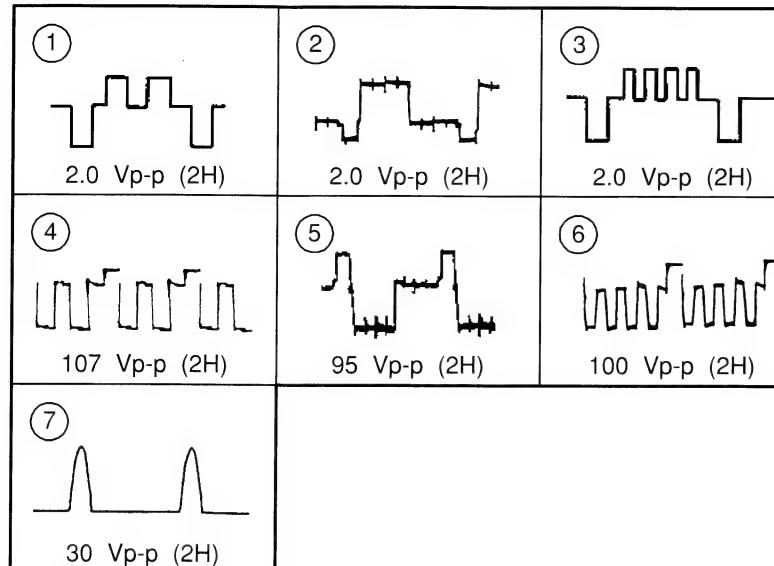
A (2/2) BOARD IC VOLTAGE TABLE

IC Voltage Table					
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1001	1-5	4.6	IC1101	1	4.8
	7-8	4.6		2	1.1
	10	4.6		4	0.9
	17	4.6		5	0.3
	23	4.6		6-7	2.4
	29	4.6		8	1.4
	31	4.6		9	4.7
	34	4.6		10	1.7
	36	4.6		11	1.5
	38	9.0		16	4.0
IC2001	40-47	4.6		18-20	4.7
	5	2.4		21	2.5
	6	4.8		22	2.3
	19	3.6		2	0.4
	20	0.1		5	0.3
	24	4.8		6-7	1.6
	26	2.1		8	4.0
	27	2.3		10	1.0
	28	4.6		11-12	4.7
	30	0.1		16	4.7
	31-32	2.4		21	4.7
	33	4.8		23	2.9
	36	4.1		25	4.7
	38	0.1		66	4.7
IC1001	39	0.6		68	4.7
	40	4.8		40	4.8
	41	0.1		42	4.8
	42	4.8		43	4.4
	44	4.1		44	4.1
	48	4.8		49	2.2
	50	4.8		52	4.8
	52	4.8		54	4.8
	54	4.8		55	4.8
	55	4.8		56	4.8
	56	4.8		57	4.8
	57	4.8		58	4.8
	58	4.8		59	4.8
	59	4.8		60	4.8

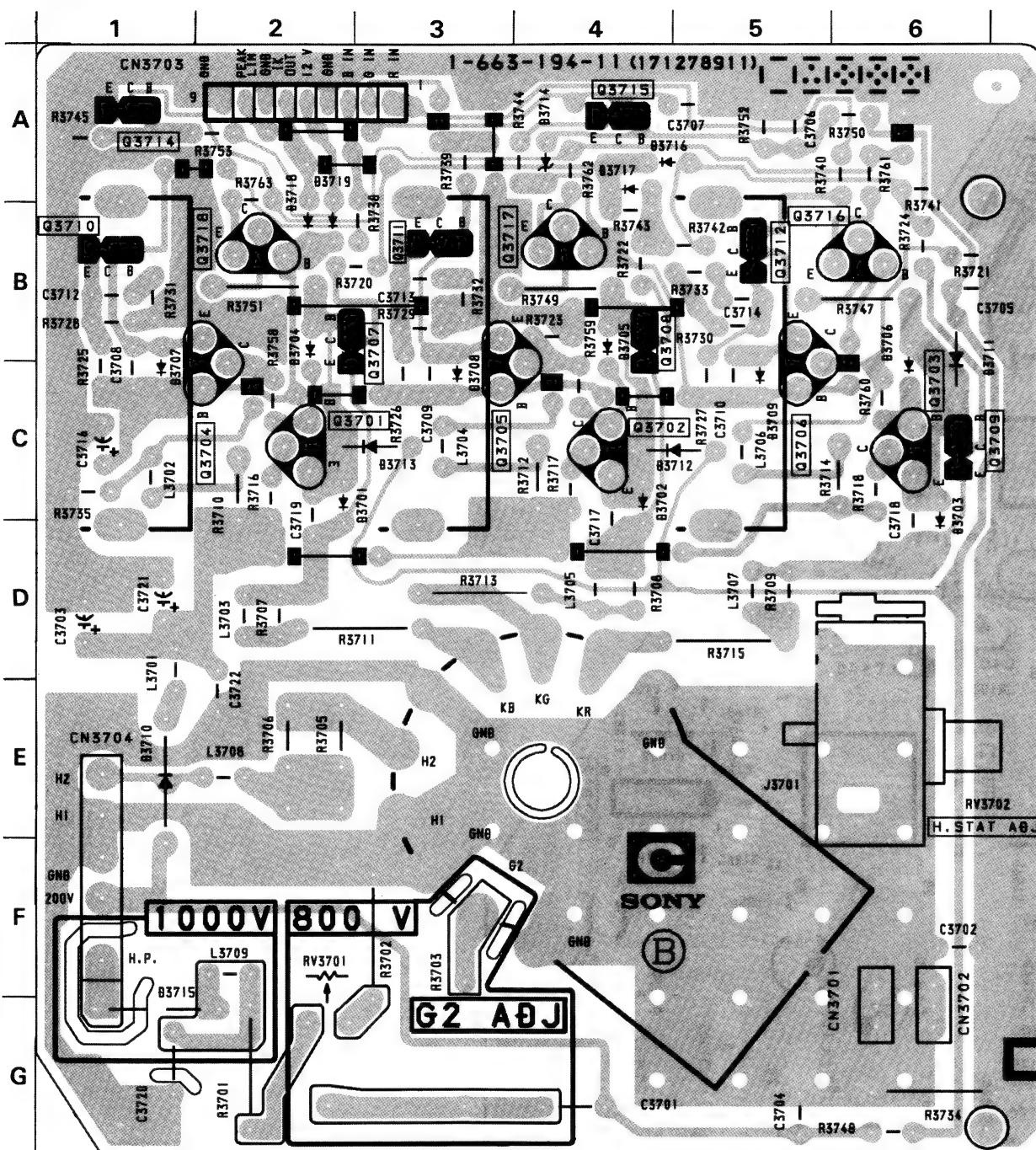
A (2/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1001	0.1	0.7	0.1
Q1004	0.1	0.7	-
Q1101	3.3	5.0	2.6

WAVEFORMS C BOAR

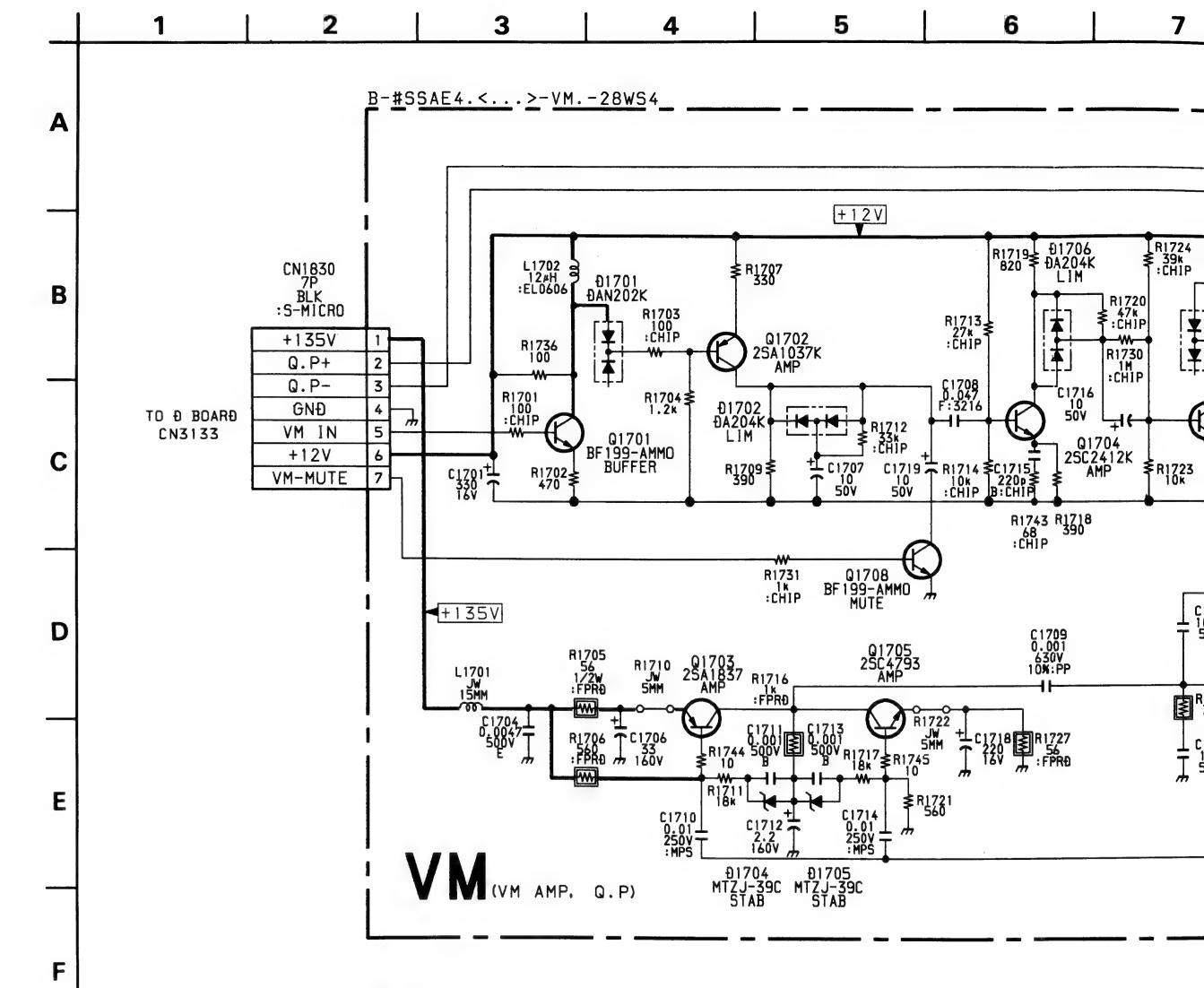


C Board



C BOARD

TRANSISTOR	
Q3701	C-2
Q3702	C-4
Q3703	C-6
Q3704	C-2
Q3705	C-3
Q3706	C-5
Q3707	B-3
Q3708	B-4
Q3709	C-6
Q3710	B-1
Q3711	B-3
Q3712	B-5
Q3715	A-4
Q3716	B-6
Q3717	B-4
Q3718	B-2
DIODE	
D3701	C-2
D3702	C-4
D3703	D-6
D3704	B-2
D3705	B-4
D3706	B-6
D3707	C-1
D3708	C-3
D3709	C-5
D3710	E-1
D3711	B-6
D3712	C-5
D3713	C-3
D3714	A-4
D3715	G-1
D3716	A-5
D3717	A-4
D3718	A-2
D3719	A-2
VARIABLE RESISTOR	
RV3701	F-2
RV3702	E-6

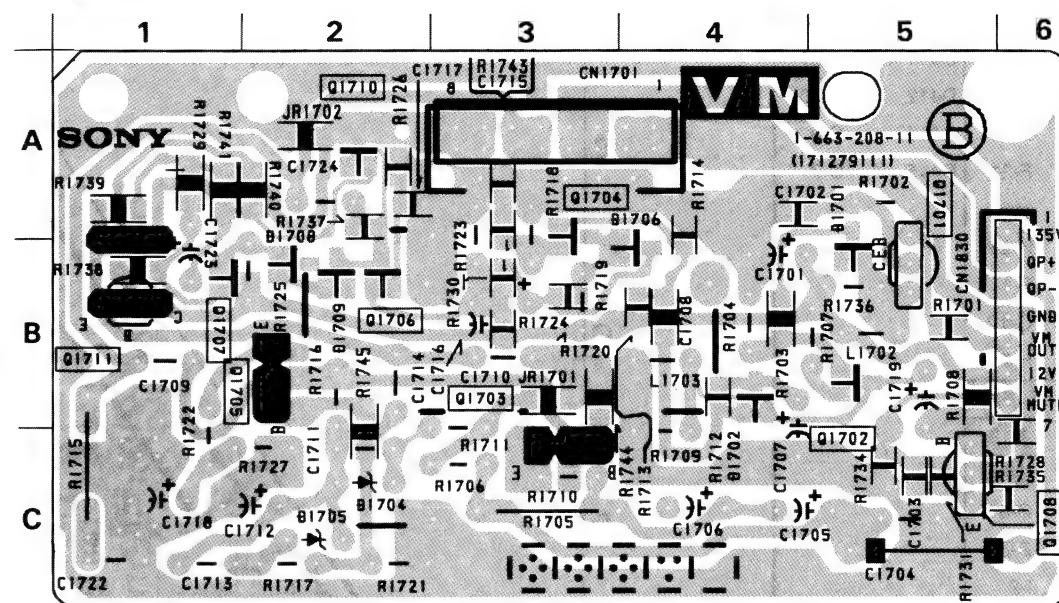


VM BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1701	0.8	0.7	2.1
Q1702	1.8	0.2	1.9
Q1703	24.0	13.3	24.0
Q1704	0.5	1.2	0.4
Q1705	0.1	12.3	-
Q1706	0.4	1.1	0.3
Q1707	1.5	2.1	1.4
Q1708	-	-	-
Q1710	1.1	-	1.2
Q1711	1.4	2.1	1.3
Q1712	1.3	1.2	-

VM [VM OUT, Q.P.]

VM Board



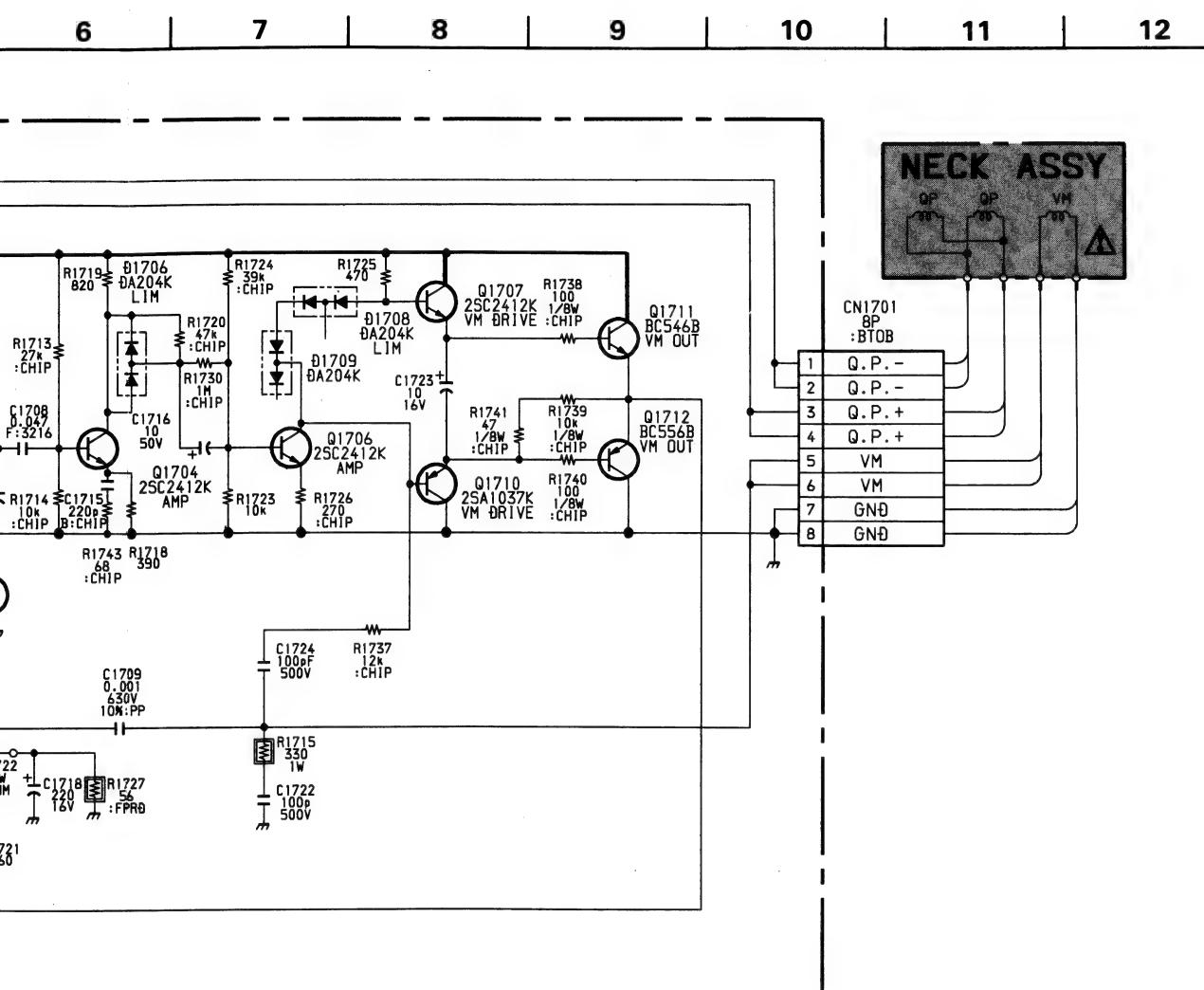
VM BOARD

TRANSISTOR

Q1701	A-5
Q1702	C-5
Q1703	B-3
Q1704	A-3
Q1705	B-2
Q1706	B-2
Q1707	B-1
Q1708	C-6
Q1710	A-2
Q1711	B-1
Q1712	A-1

DIODE

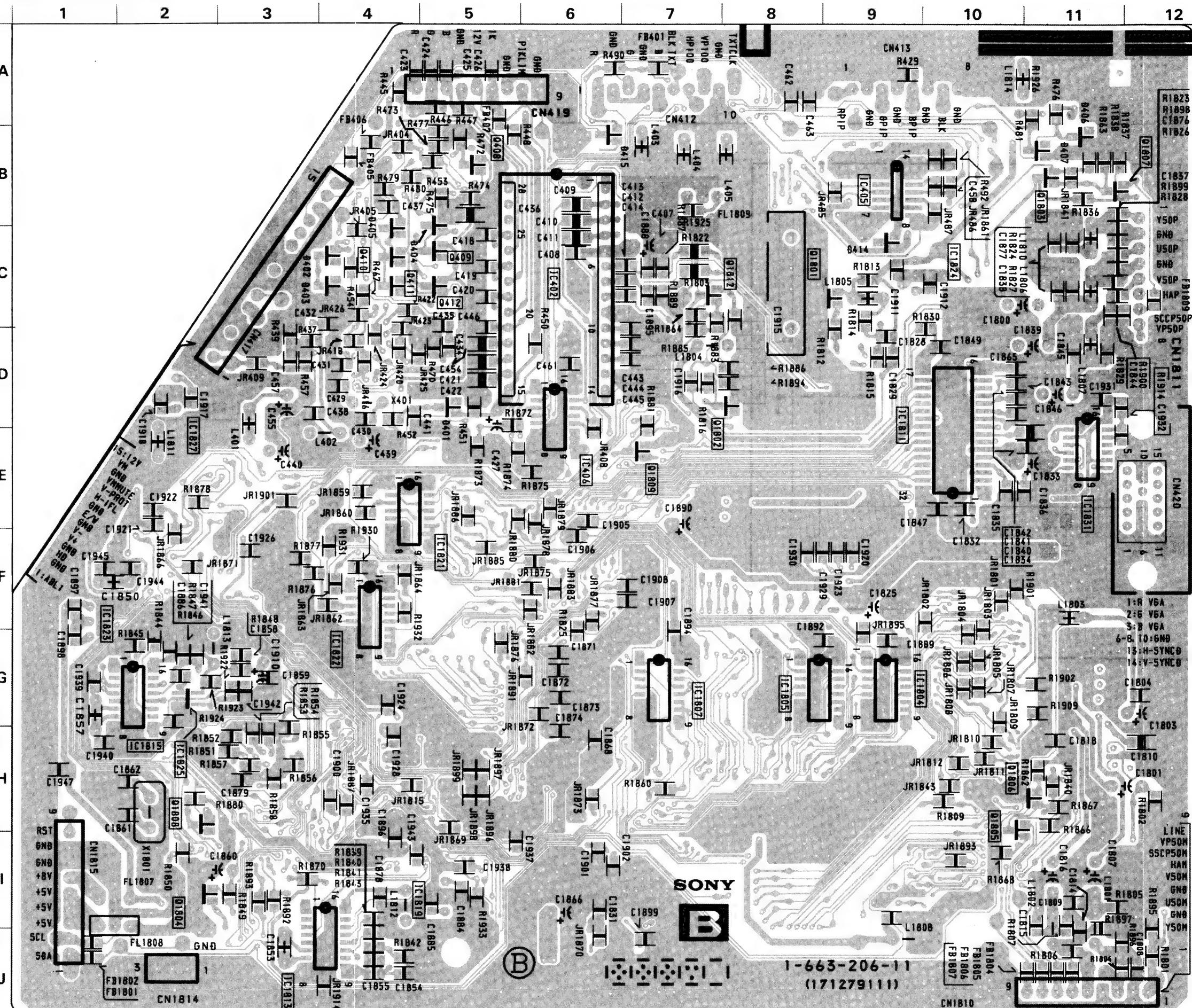
D1701	A-5
D1702	C-4
D1704	C-2
D1705	C-2
D1706	A-4
D1708	B-2
D1709	B-2



B BOARD

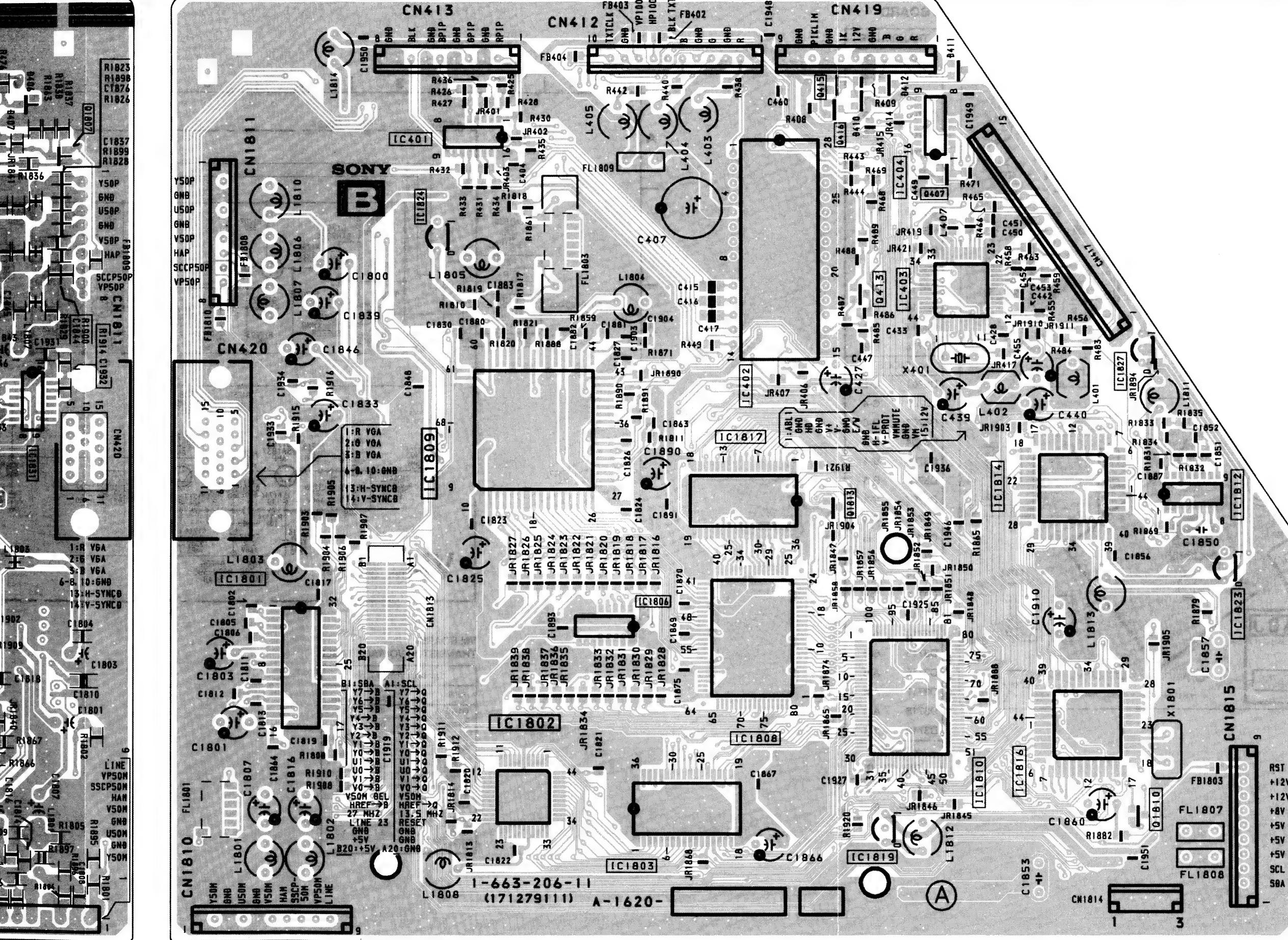
IC	DIODE
IC402	C-6
IC403	D-20
IC1801	G-13
IC1802	H-16
IC1803	I-17
IC1809	E-15
IC1812	F-24
IC1814	F-21
IC1815	H-2
IC1816	H-22
IC1823	F-1
IC1824	C-10
IC1825	H-2
TRANSISTOR	
Q415	A-19
Q416	B-20
Q1801	C-8
Q1802	D-8
Q1804	I-2
Q1805	H-10
Q1808	H-2
Q1809	E-7
Q1810	I-23
Q1812	C-8

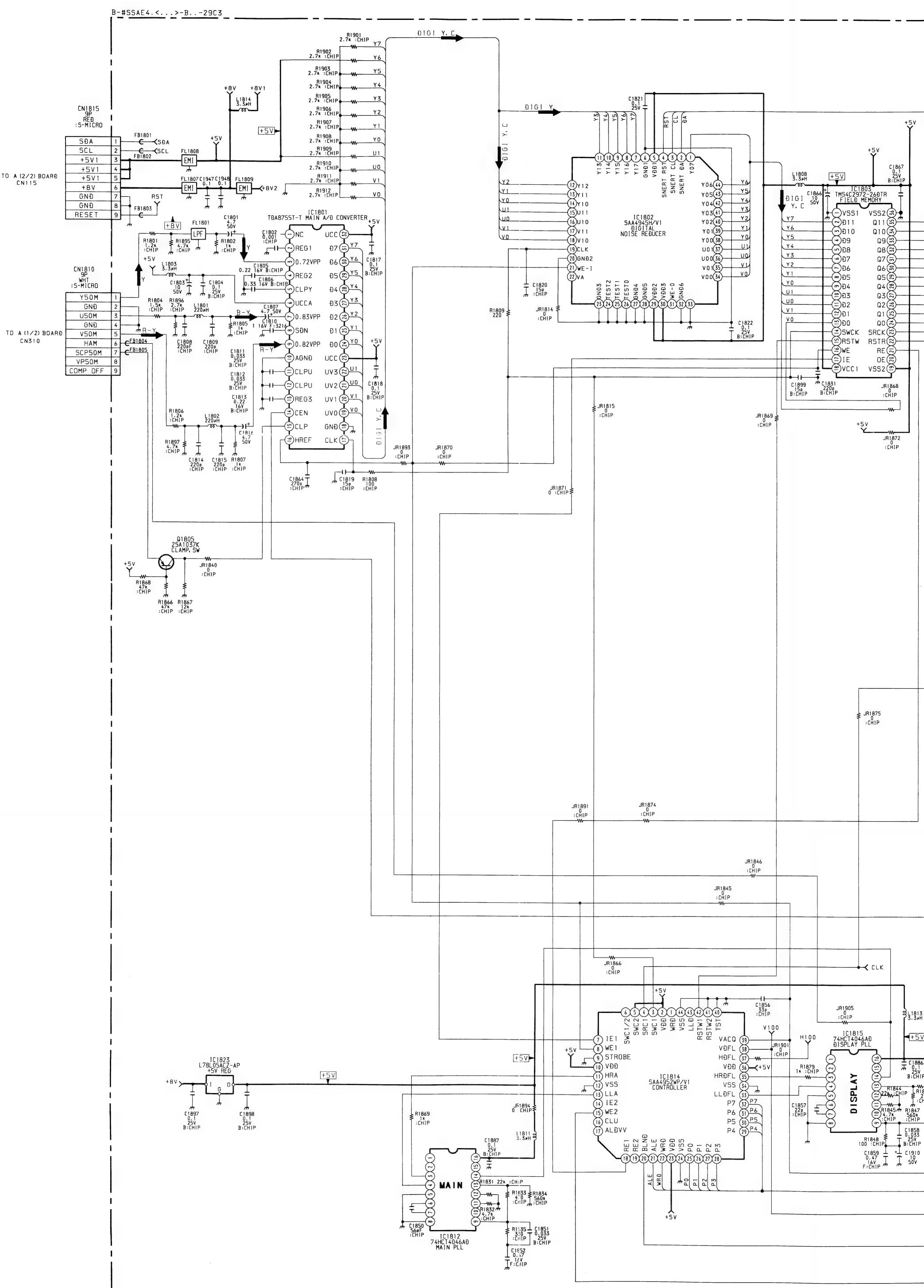
B Board < Conductor Side >

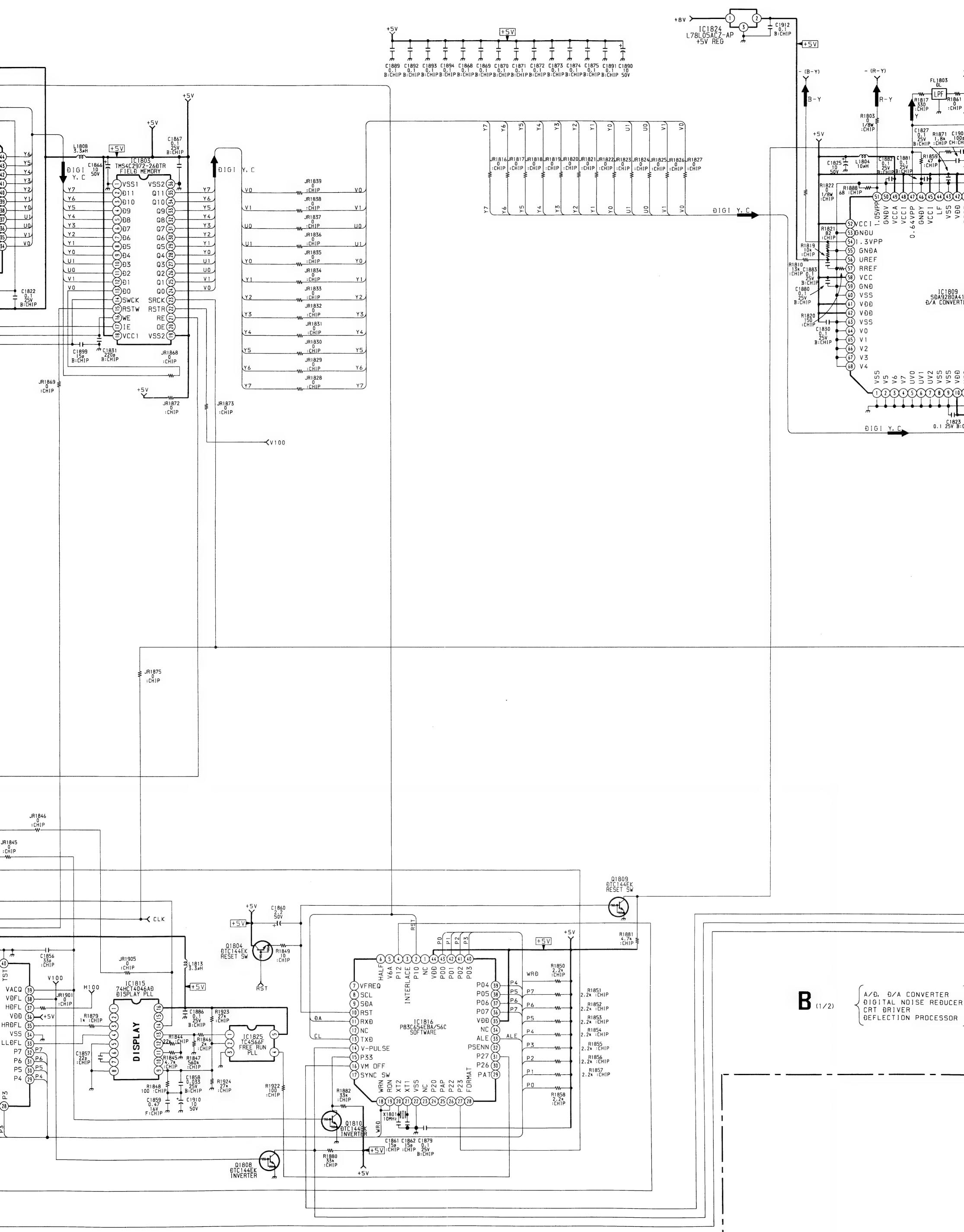


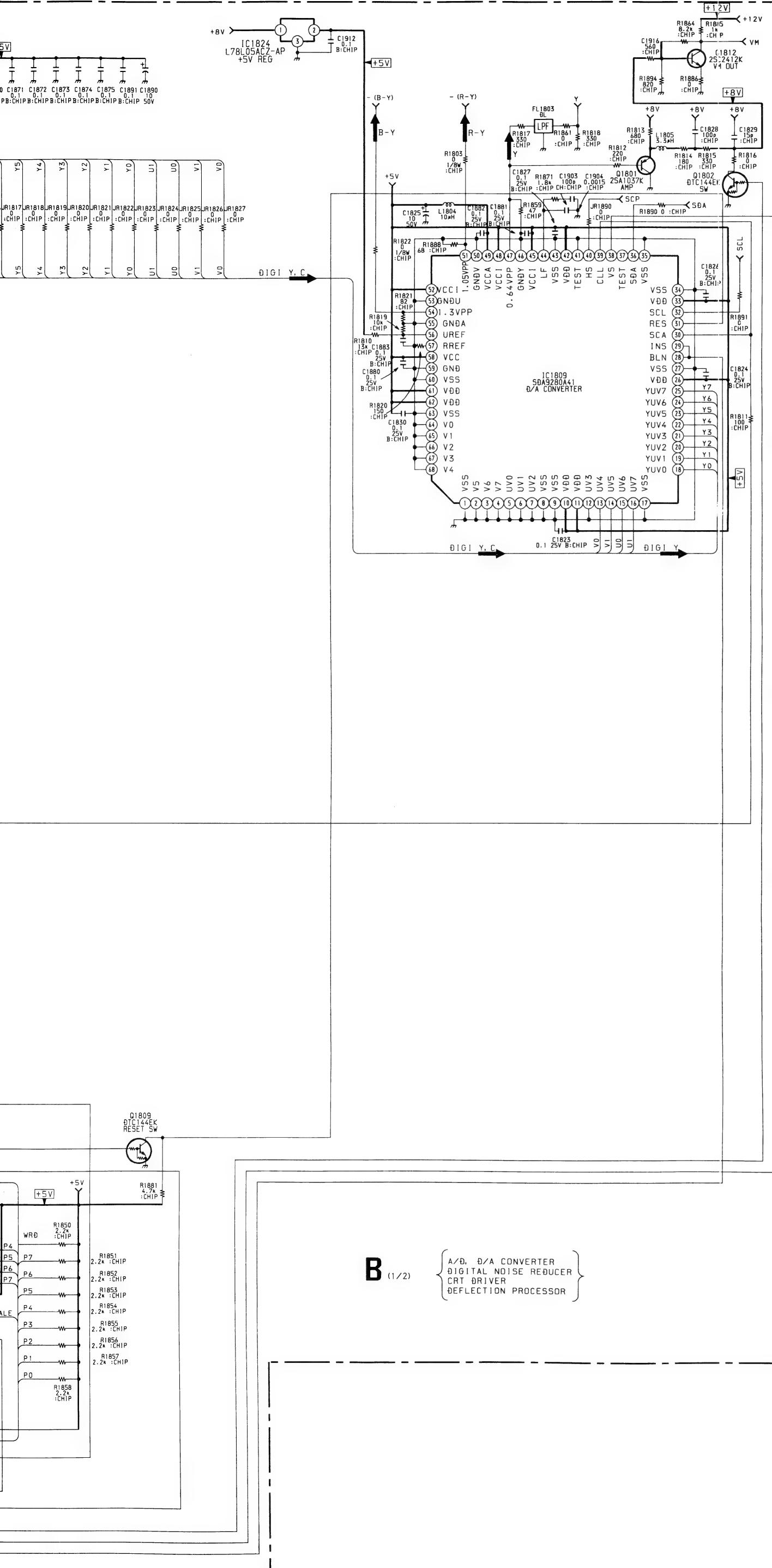
B Board < Component Side >

13 14 15 16 17 18 19 20 21 22 23 24









B BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q411	0.1	4.8	4.8
Q412	0.1	4.8	4.8
Q415	1.8	0.1	-
Q416	0.1	5.6	-
Q1801	0.1	-	0.9
Q1802	4.0	0.1	0.1
Q1804	0.3	4.8	0.1
Q1805	2.5	1.3	0.7
Q1807	2.5	1.3	0.7
Q1808	0.1	4.7	0.1
Q1809	0.1	0.1	0.1
Q1810	0.1	4.8	-
Q1812	0.5	10.5	-
Q1813	0.1	3.7	0.1

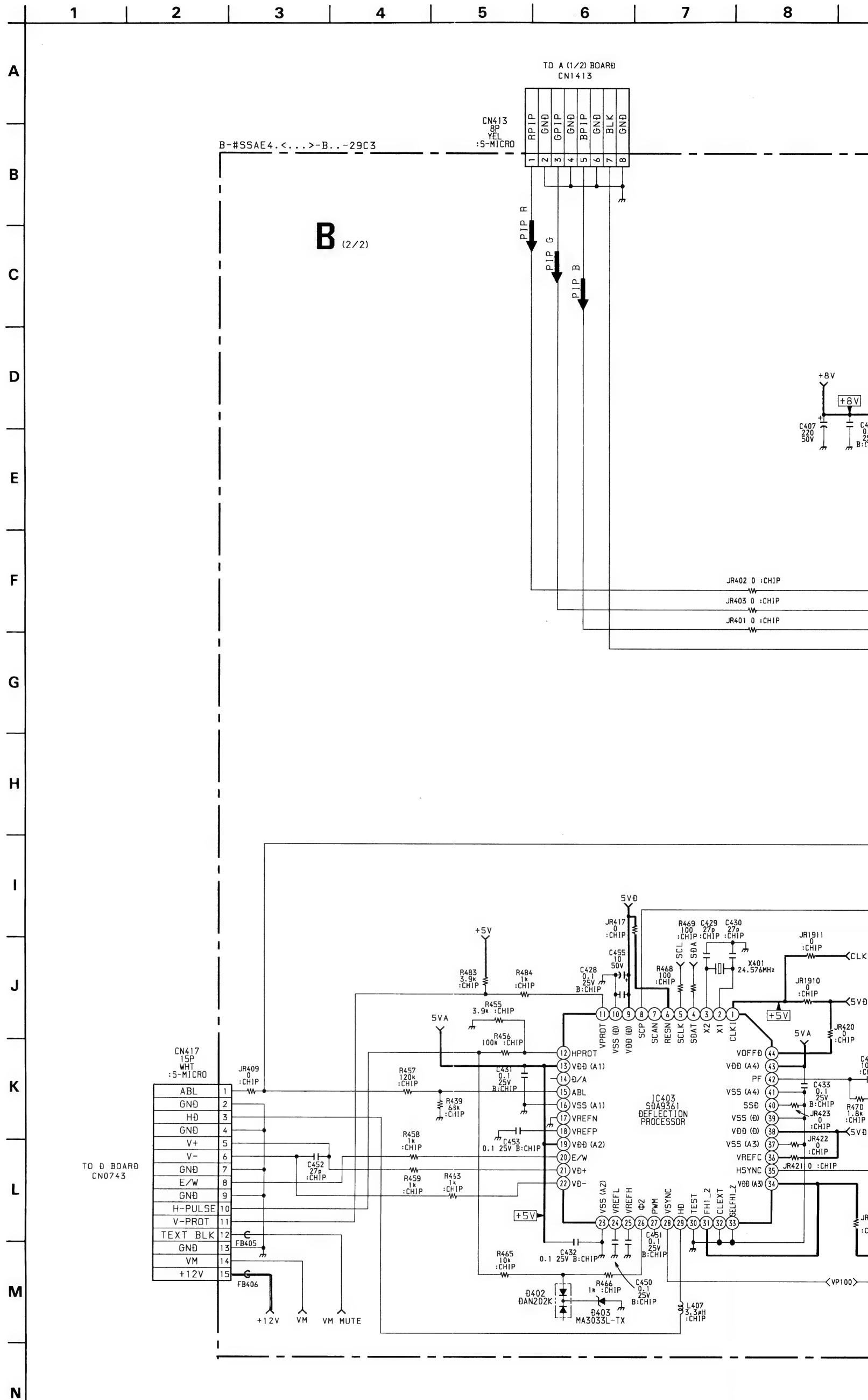
B (1/2) BOARD
IC VOLTAGE TABLE

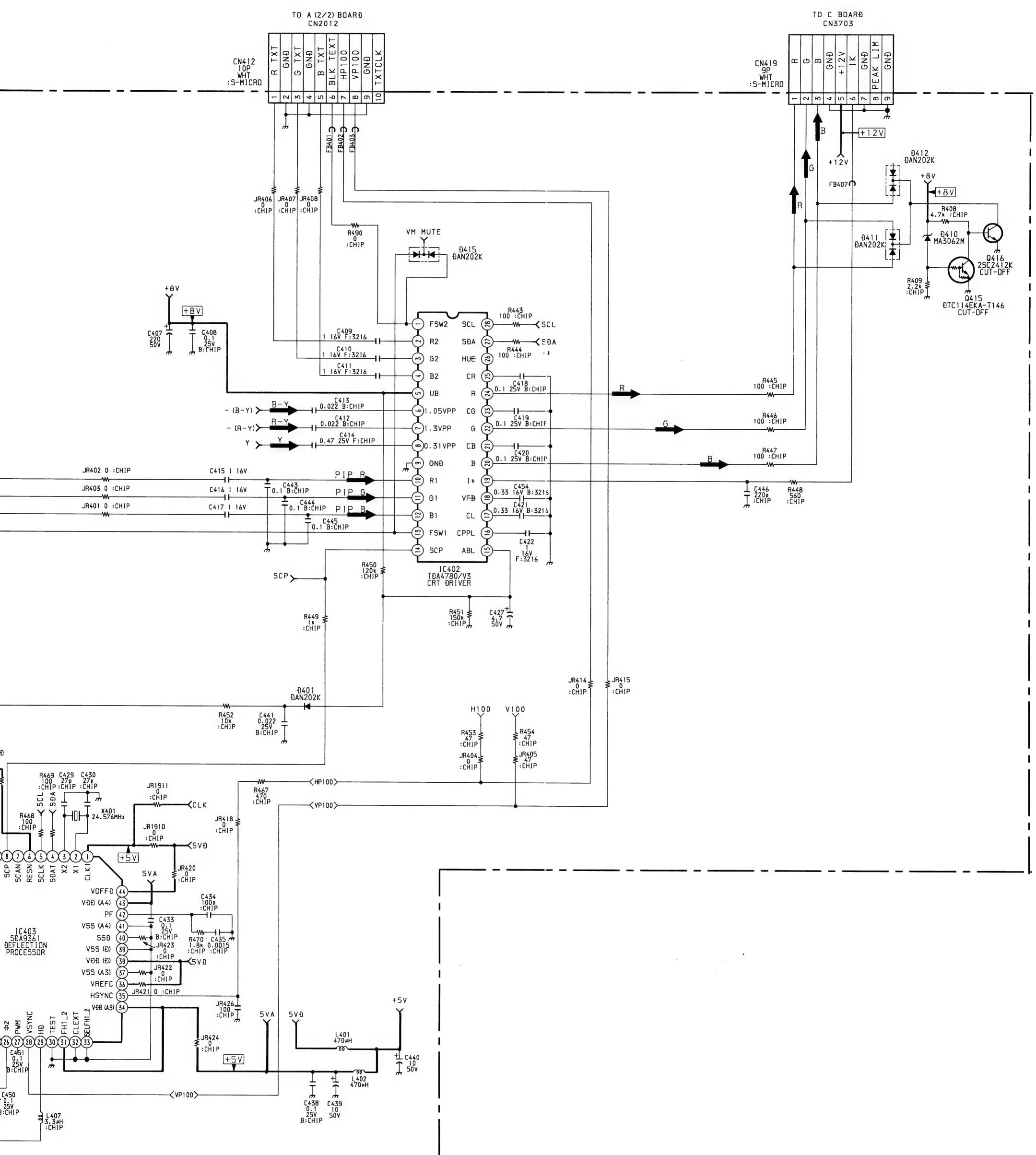
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1812	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1813	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1815	1	5.0
	2	2.3
	3-4	2.5
	6-7	0.8
	9-11	3.0
	12	4.5
	13	3.0
	14	0.4
	15	0.2
	16	5.2
IC1821	2	2.5
	4-5	2.3
	12	2.0
	14	2.0
	15	2.6
	16	8.0
IC1822	2	2.9
	4-5	2.6
	12	2.3
	14	2.1
	15	2.8
	16	8.0

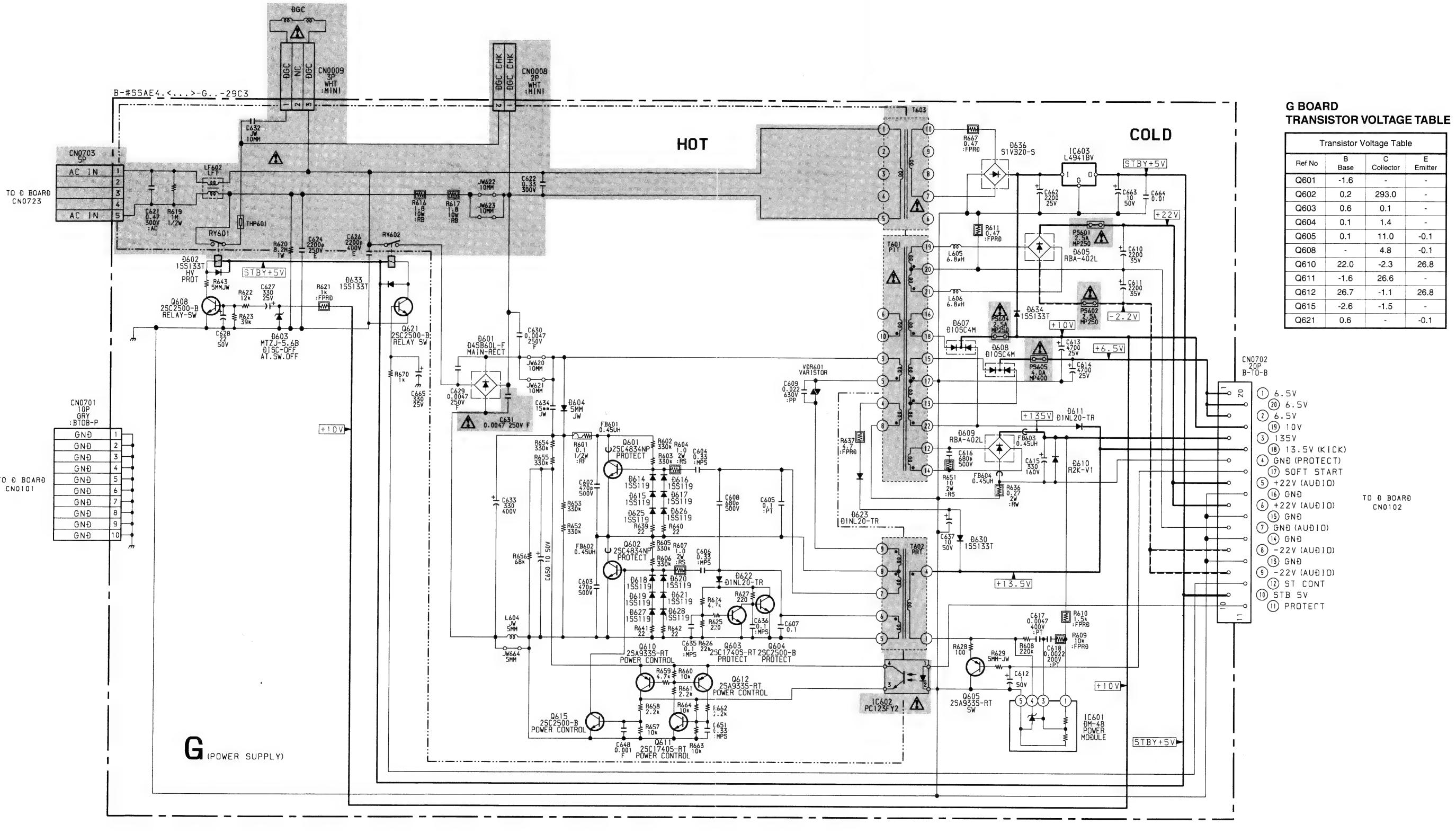
B (1/2)
 {
 A/D, D/A CONVERTER
 DIGITAL NOISE REDUCER
 CRT DRIVER
 DEFLECTION PROCESSOR
 }

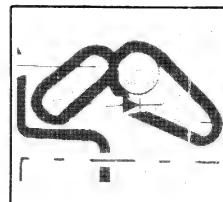
**B (2/2) BOARD
IC VOLTAGE TABLE**

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC402	2-4	5.0
	5	7.8
	6-7	4.0
	8	3.7
	10-12	5.0
	14	0.7
	16	4.7
	17	5.1
	18	1.8
	19	7.5
	20	2.5
	21	3.3
	22	2.8
	23	3.3
	24	2.9
	25	3.3
	27	4.0
	28	3.8
IC405	5	3.2
	9	3.2
	13-14	3.2
IC406	16	4.8









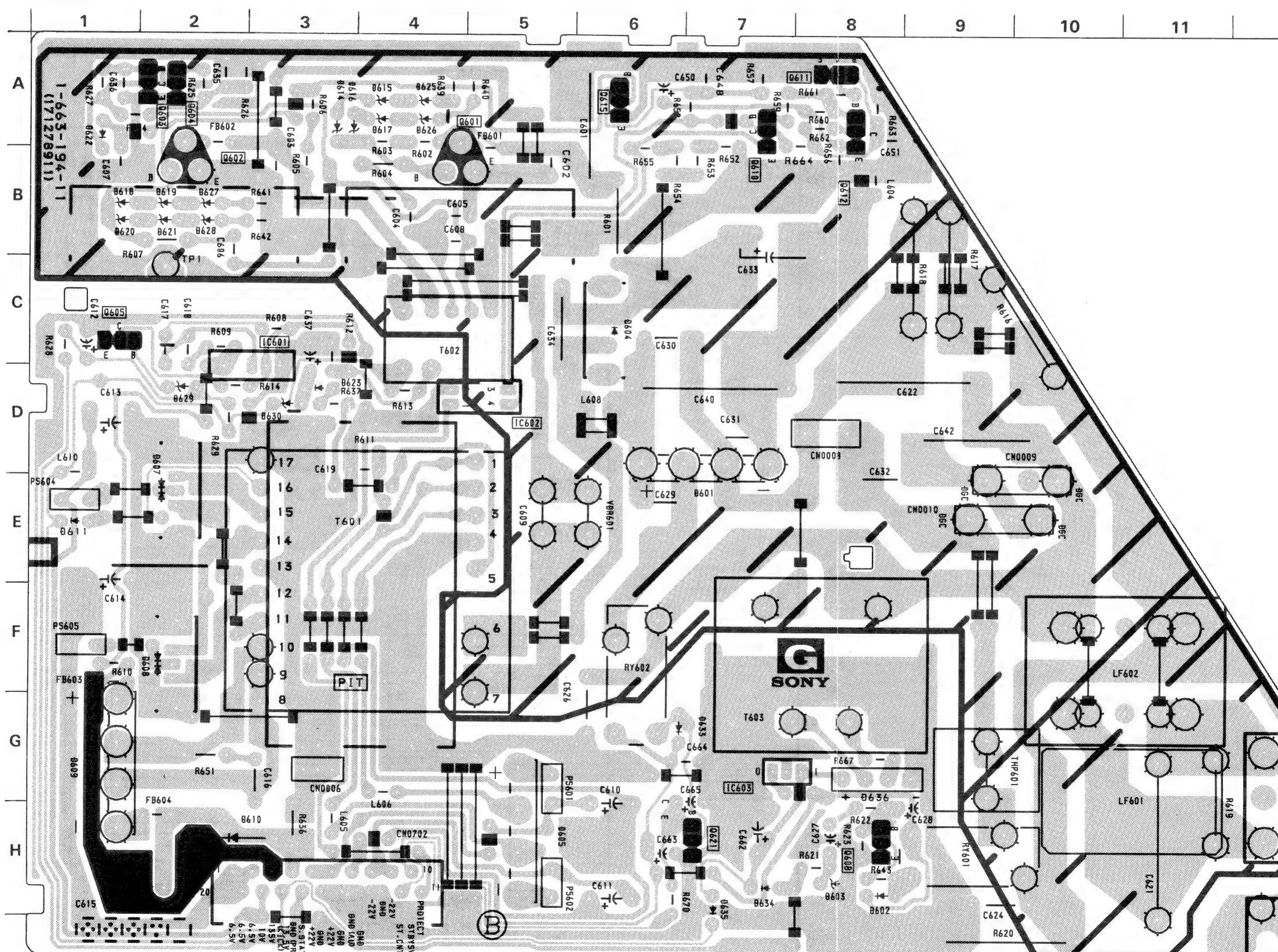
NOTE:

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

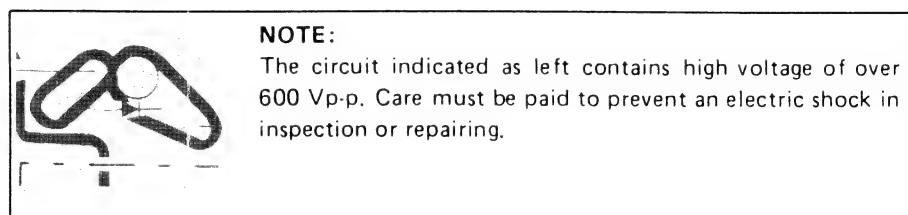
G

POWER SUPPLY

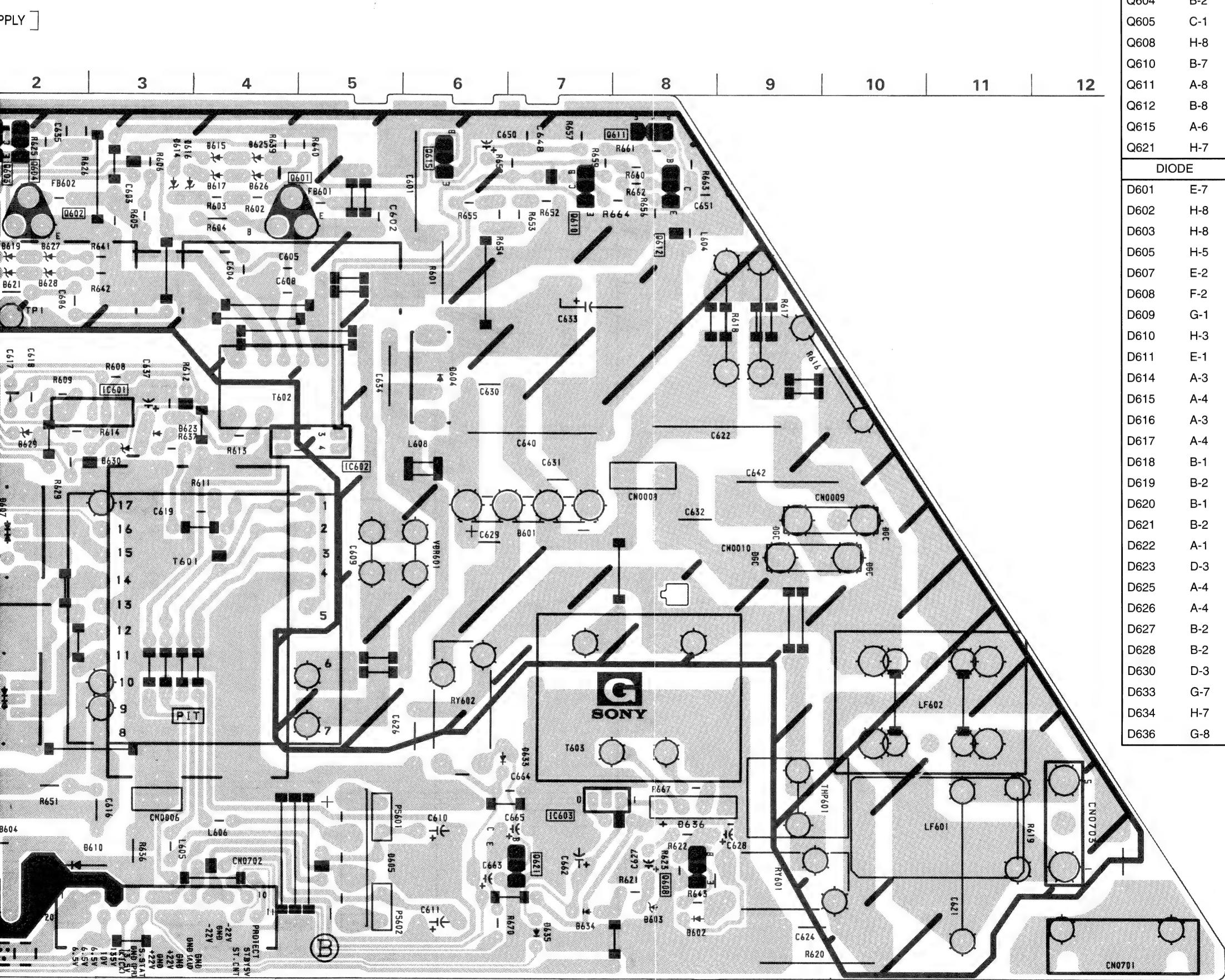
G Board



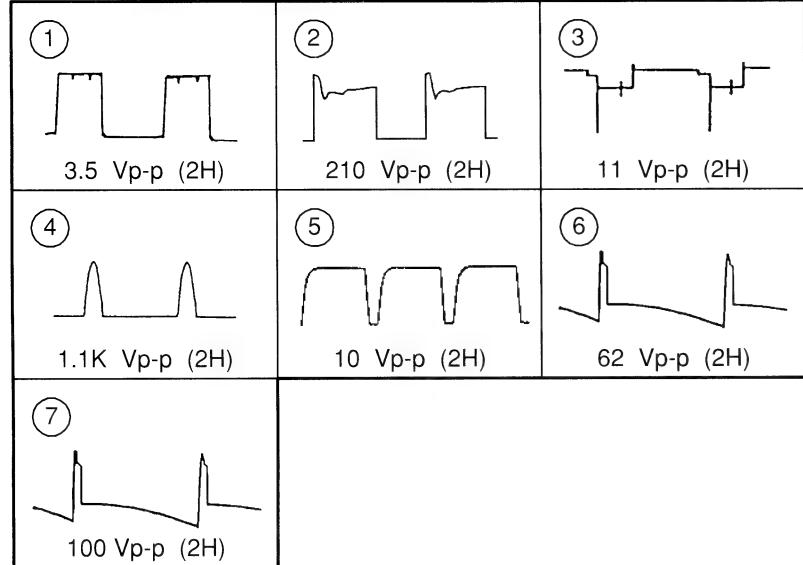
G BOARD



IC	
IC601	C-3
IC602	D-5
IC603	G-7
TRANSISTOR	
Q601	A-5
Q602	B-2
Q603	B-2
Q604	B-2
Q605	C-1
Q608	H-8
Q610	B-7
Q611	A-8
Q612	B-8
Q615	A-6
Q621	H-7
DIODE	
D601	E-7
D602	H-8
D603	H-8
D605	H-5
D607	E-2
D608	F-2
D609	G-1
D610	H-3
D611	E-1
D614	A-3
D615	A-4
D616	A-3
D617	A-4
D618	B-1
D619	B-2
D620	B-1
D621	B-2
D622	A-1
D623	D-3
D625	A-4
D626	A-4
D627	B-2
D628	B-2
D630	D-3
D633	G-7
D634	H-7
D636	G-8

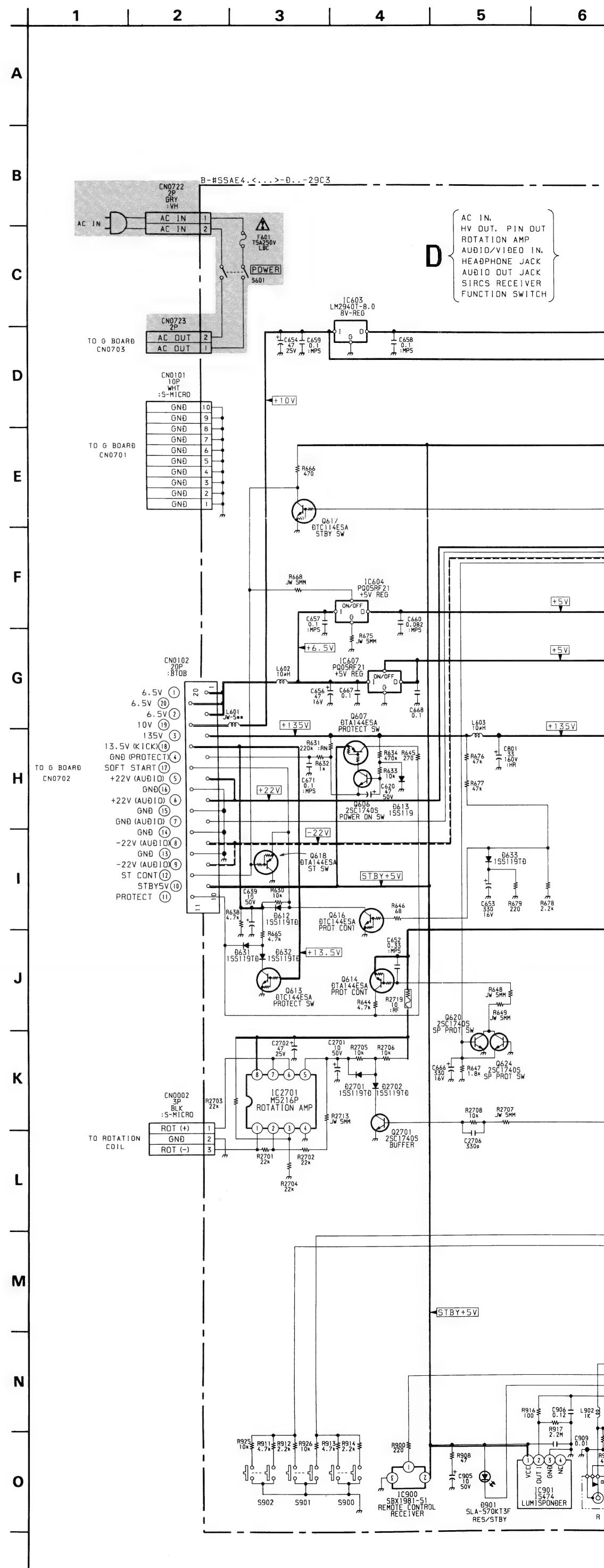


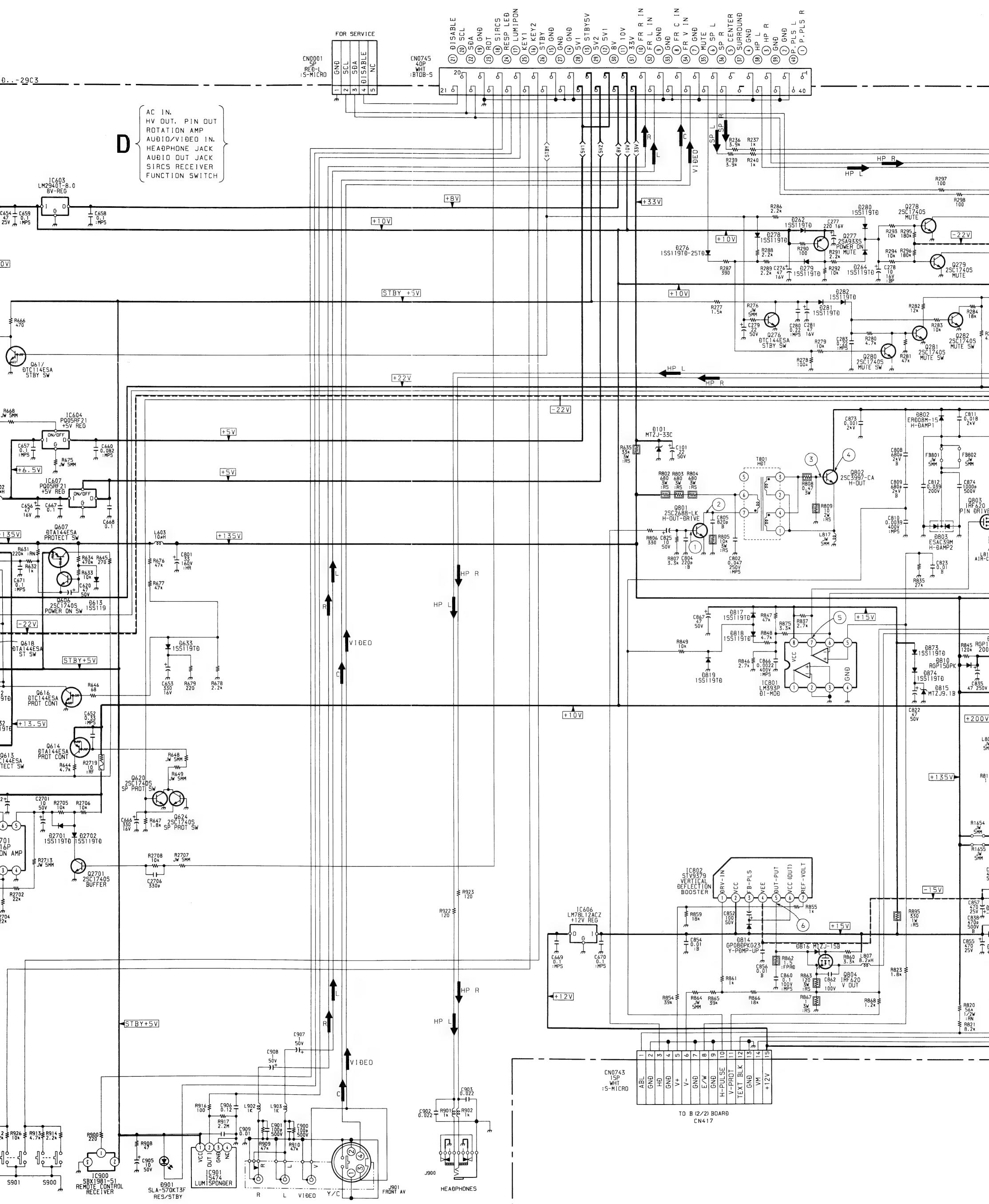
WAVEFORMS D BOARD

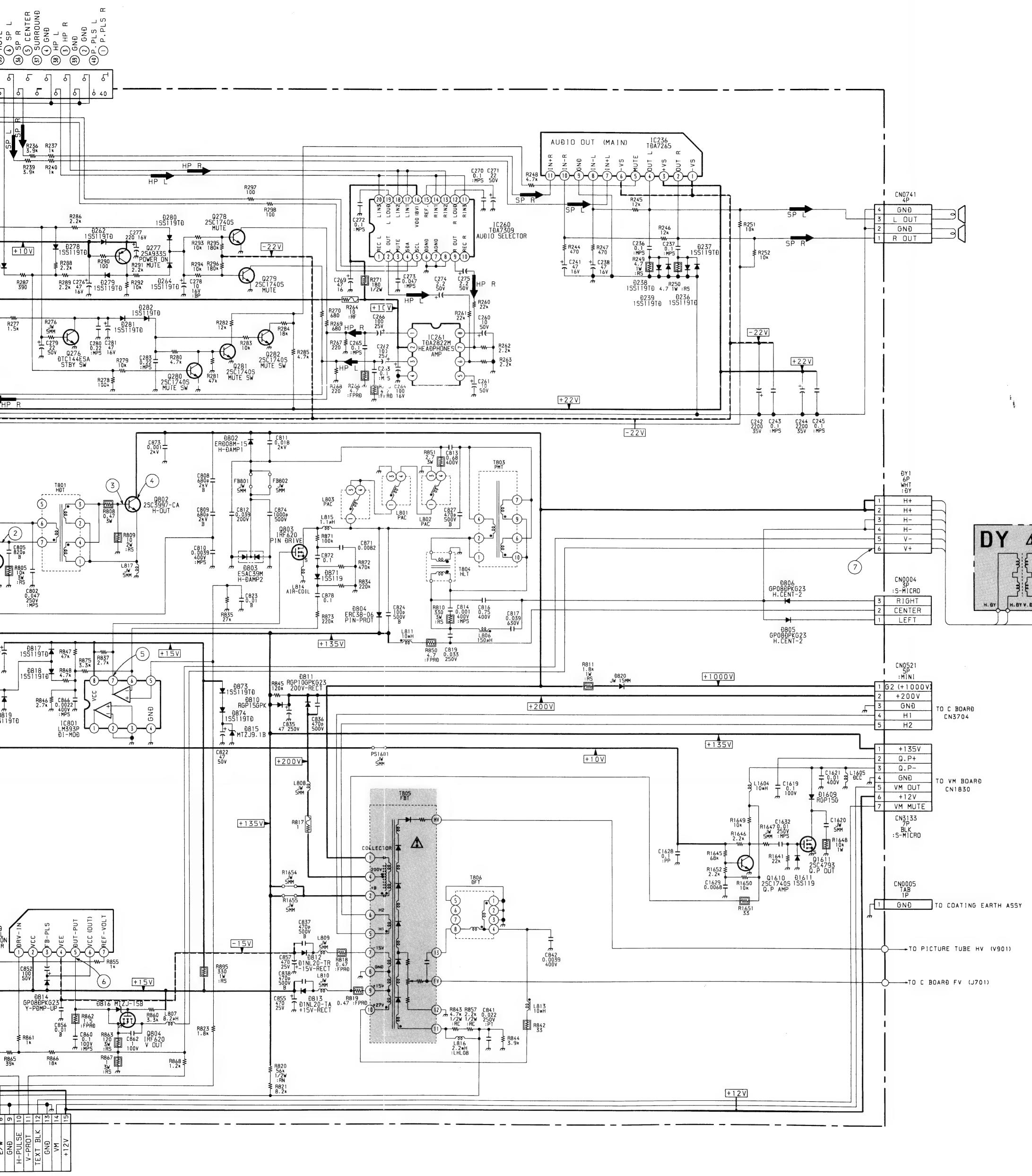


D BOARD
TRANSISTOR VOLTAGE TABLE

Ref No	B Base	C Collector	E Emitter
Q276	0.7	4.0	-
Q277	10.0	-	9.7
Q278	-1.3	-	-
Q279	-1.3	-	-1.3
Q280	0.4	0.7	-
Q281	0.7	-	-
Q282	0.7	-	-
Q801	-1.0	101.0	-
Q802	-	136.0	-
Q803	9.0	15.0	-
Q804	11.3	0.1	-1.3
Q606	0.5	4.8	0.3
Q607	4.8	1.6	4.8
Q613	13.5	-	-
Q614	10.0	9.0	10.0
Q616	0.7	-	-
Q617	0.7	3.5	-
Q618	3.5	-	-
Q620	-	10.0	-
Q624	-	10.0	-
Q2701	-	2.3	-
Q1610	-0.5	2.2	-
Q1611	0.2	43.4	-



TO A (1/2) BOARD
CN101



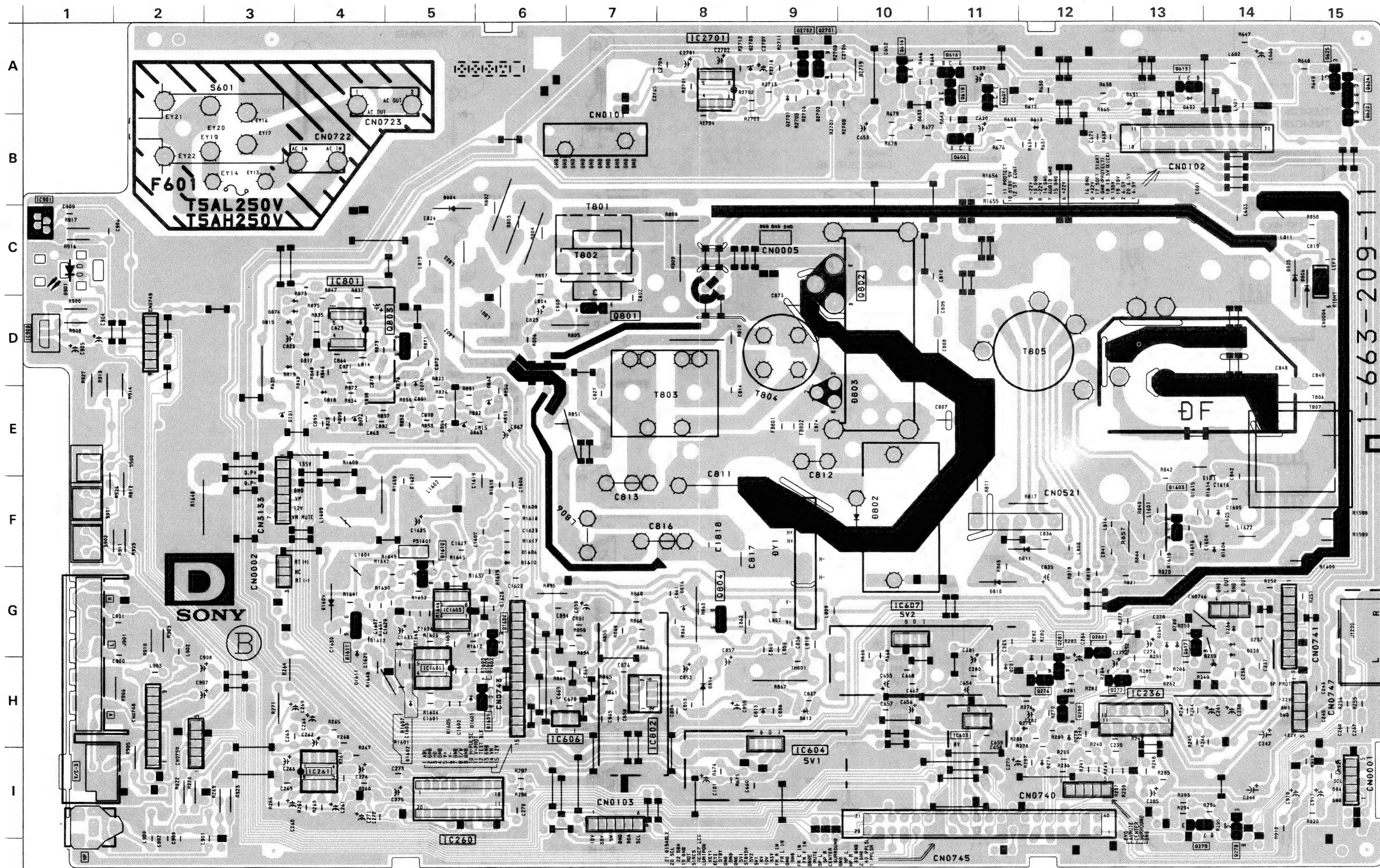
D

AC IN, HV OUT, PIN OUT, ROTATION AMP, AUDIO/VIDEO IN,
HEADPHONE JACK, SIRCS RECEIVER, FUNCTION SWITCH

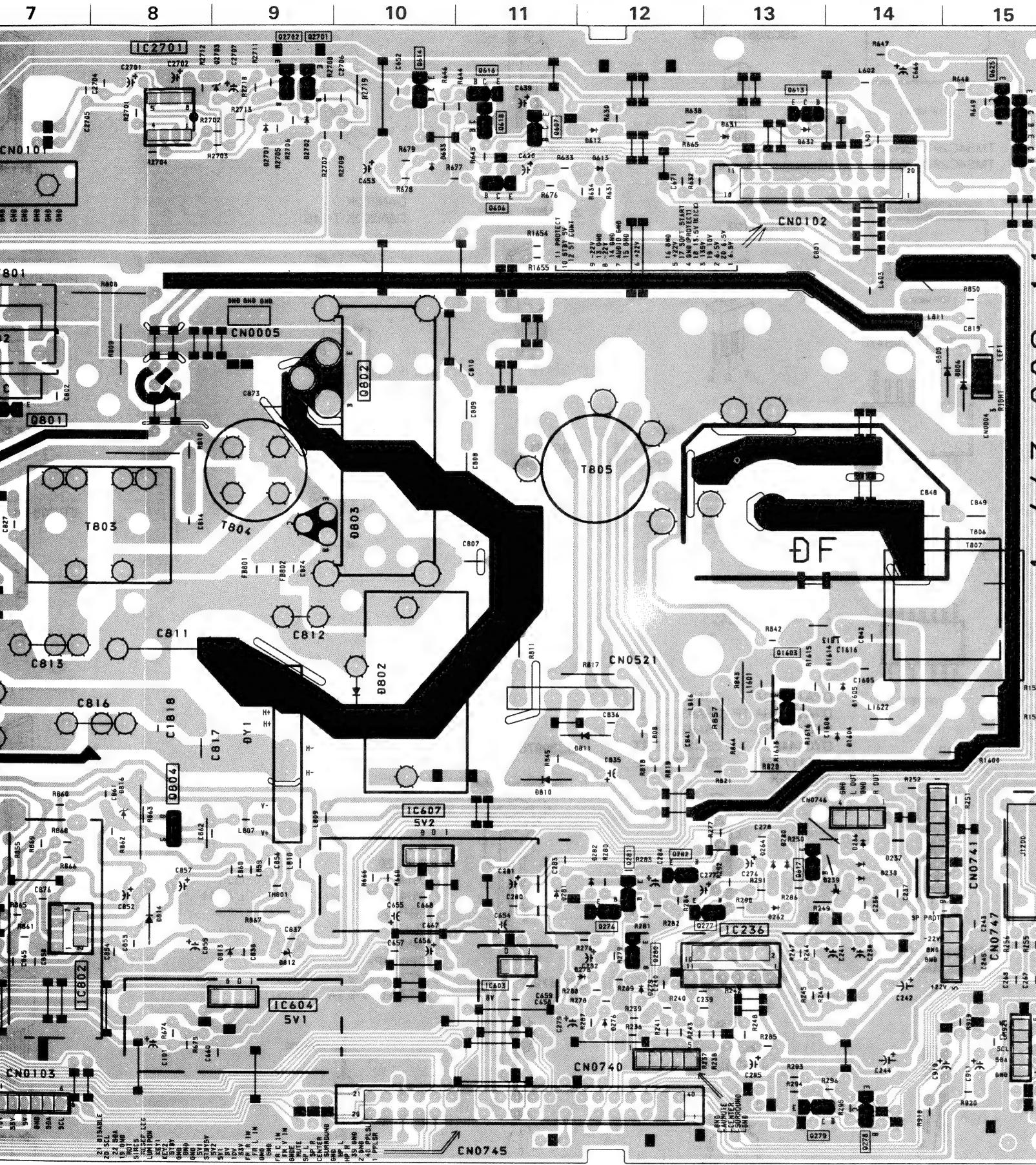
KV-29C3

KV-29C3

D Board



D BOAR	
IC236	IC
IC260	
IC261	
IC603	
IC604	
IC606	
IC607	
IC801	
IC802	
IC900	
IC901	
IC2701	TRANS
Q276	
Q277	
Q278	
Q279	
Q280	
Q281	
Q282	
Q606	
Q607	
Q613	
Q614	
Q616	
Q617	
Q618	
Q620	
Q624	
Q801	
Q802	
Q803	
Q804	
Q1610	
Q1611	
Q2701	



NOTE:

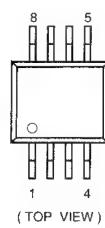
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

D BOARD

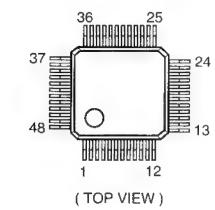
IC	DIODE
IC236	H-13
IC260	I-5
IC261	I-4
IC603	H-11
IC604	H-9
IC606	H-7
IC607	G-10
IC801	C-4
IC802	H-8
IC900	D-1
IC901	C-1
IC2701	A-8
	TRANSISTOR
Q276	H12
Q277	H-13
Q278	I-14
Q279	I-14
Q280	H-12
Q281	G-12
Q282	G-13
Q606	B-11
Q607	A-11
Q613	A-13
Q614	A-10
Q616	A-11
Q617	G-13
Q618	A-11
Q620	A-15
Q624	A-15
Q801	D-7
Q802	C-10
Q803	D-5
Q804	G-8
Q1610	F-5
Q1611	G-4
Q2701	A-9
	DIODE
D101	E-3
D236	G-14
D237	G-14
D238	G-14
D239	G-14
D262	H-13
D264	G-13
D276	I-12
D278	H-12
D279	H-12
D280	G-13
D281	H-12
D282	G-12
D612	A-12
D613	B-12
D631	A-13
D632	A-14
D633	B-11
D802	F-10
D803	E-10
D804	B-5
D805	C-15
D806	C-15
D810	G-11
D811	F-12
D812	H-9
D813	H-9
D814	H-8
D815	D-3
D816	G-8
D817	D-4
D818	E-4
D819	D-3
D873	D-4
D874	D-3
D901	C-1
D1609	G-4
D1611	H-4
D2701	A-9
D2702	A-9

5-4. SEMICONDUCTORS

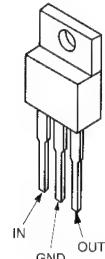
BA7046F
BA7046F-T1
MB3793-42PNF
MB3793-42PNF-ER



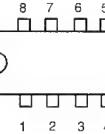
CXA1855Q-T6



LM2940CT-9.0
LM2940T-8.0
LM2940T-9.0
L4941BV
TEA7605



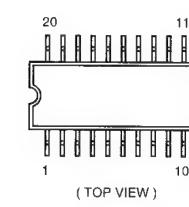
LM393P
M5216P
ST24C16FB6
TDA2822M
UPC393C



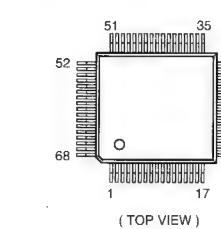
LM78L05ACZ
LM78L12ACZ
L78L05ACZ-AP
L78L12ACZ-AP



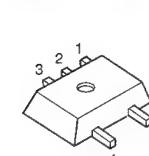
MC74F240DWR2



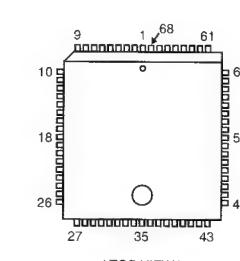
P83C654EBA/560
SDA9280A41



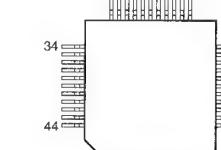
TC4S66F
TC4S66F-TE85L



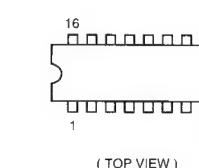
MSP3400C-PS-C6-T-ND
MSP3410B-PS-F7-T-ND
SDA30C164-GEG
SDA5273-C126-GEG



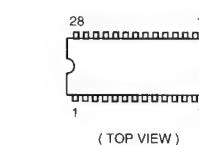
SAA4945H/V1
SDA9361



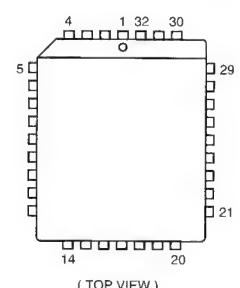
TDA4665T-T



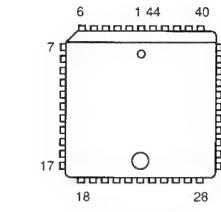
TDA4780/V3



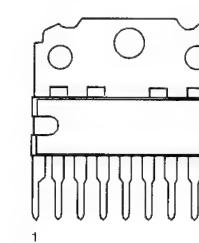
M27C4001-15C1
M27C4001-15C1-AE401



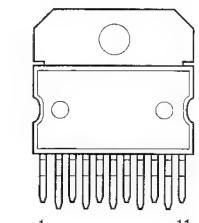
SAA4952WP/V1



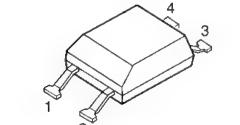
TDA6111Q
TDA6111Q/N4



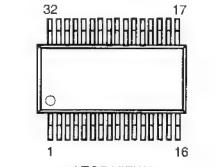
TDA7265



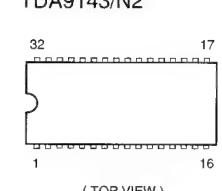
PC123F2
PC123FY2



SDA9288X-A141
TDA8755T-T



TDA9143/N2
(TOP VIEW)



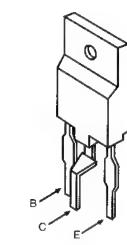
BF421L-AMMO
2SC2500-B
2SC2551-O
2SC2551O-TPE2



IRF620



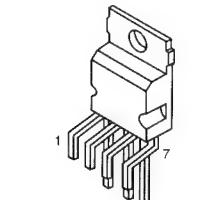
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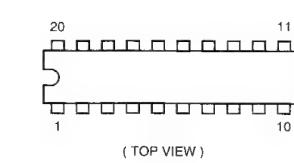
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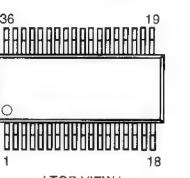
STV9379



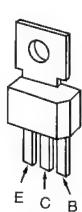
TDA7309



TMS4C2972-26DTR
TMS4C2972-28DTR



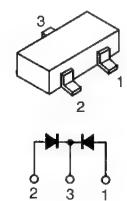
BF871-127



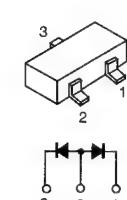
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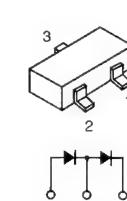
DAN202K
DAN202K-T-146



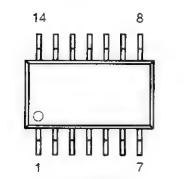
DAP202K
DAP202K-T-146



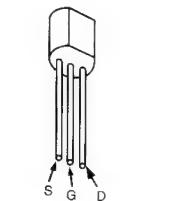
DA204K
DA204K-T-146



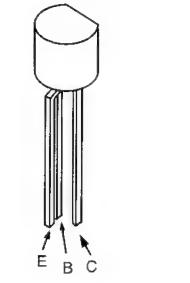
74LVC08D



BC546B
BC556B



BF199
BF199-AMMO



DTA144ESA
DTA144ESA-TP
DTC114ESA-TP

2SA933AS-RT
2SA933AS-QRT

2SA933S-RT

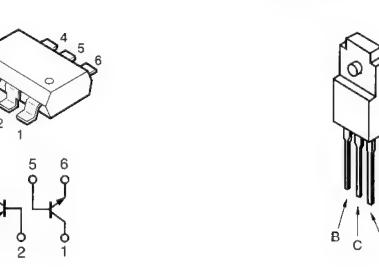
2SC1740S-RT

2SC2785-HFE

2SA1175-HFE

2SA733-K

IMZ1A-T109



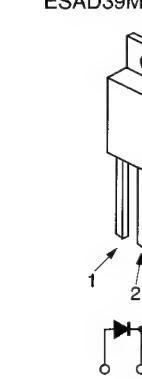
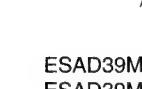
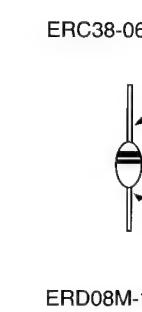
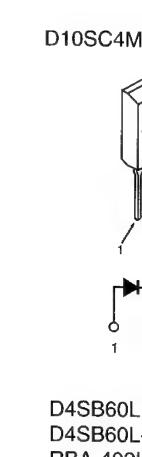
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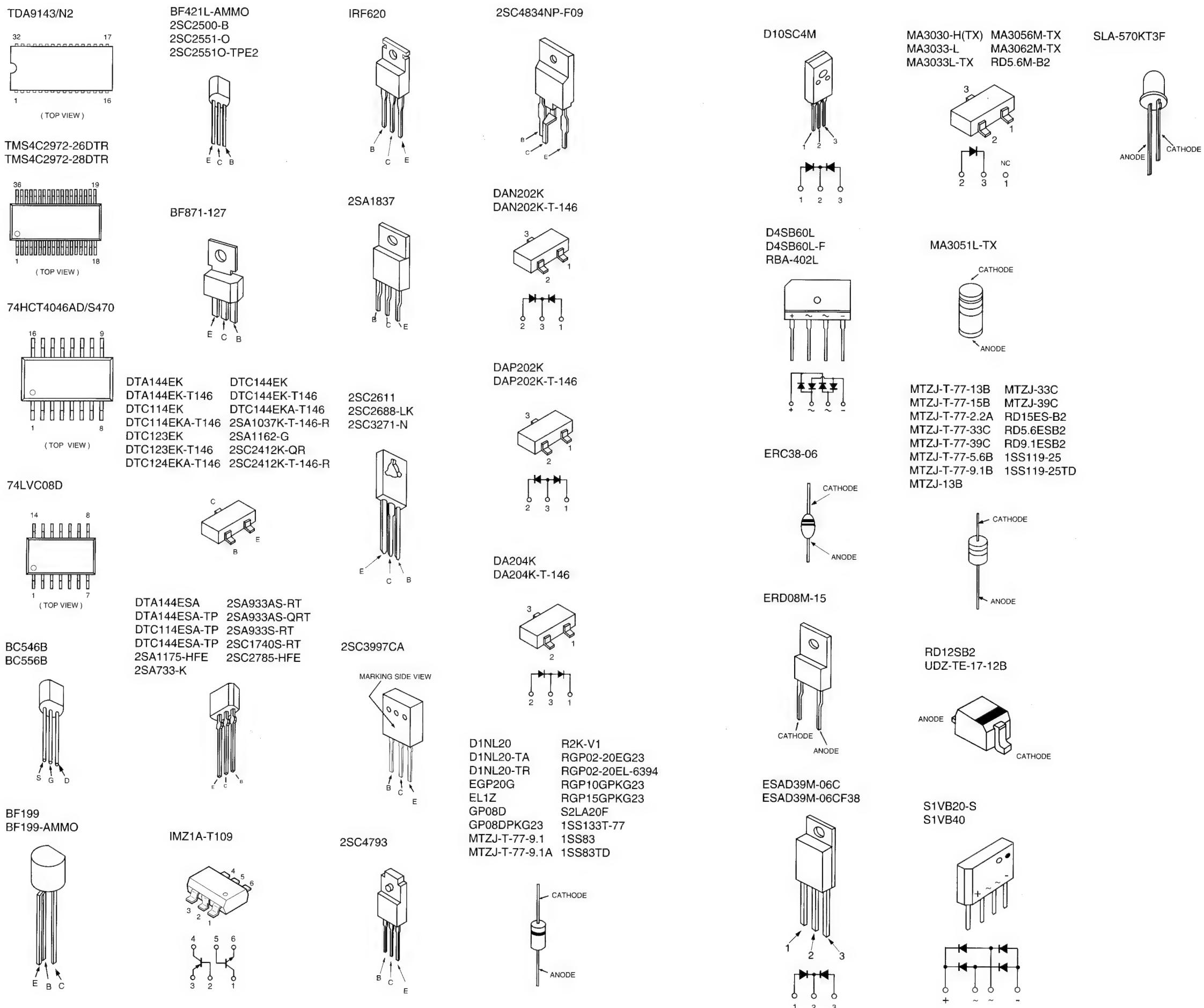


D1NL20
D1NL20-TA
D1NL20-TR
EGP20G
EL1Z
GP08D
GP08DPKG23
MTZJ-T-77-9.1
MTZJ-T-77-9.1A

R2K-V1
RGP02-20EG23
RGP02-20EL-6394
RGP10GPKG23
RGP15GPKG23
S2LA20F
1SS133T-77
1SS83
1SS83TD

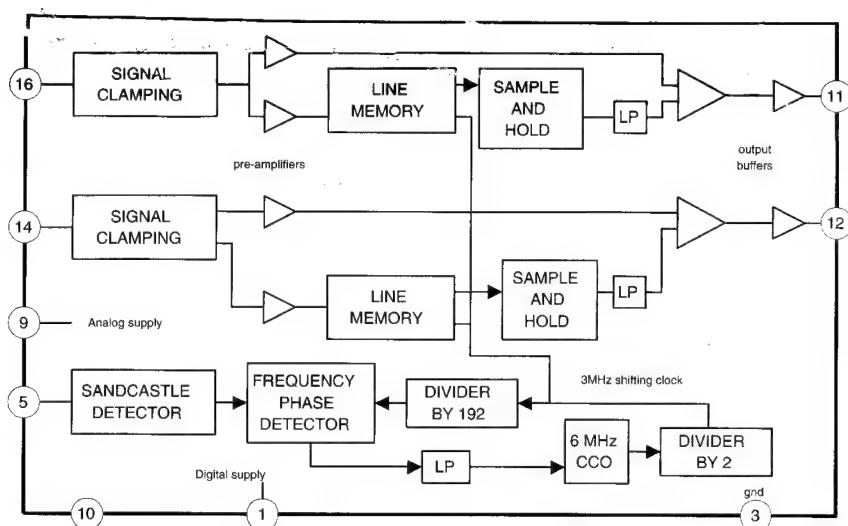
ESAD39M-C
ESAD39M-C



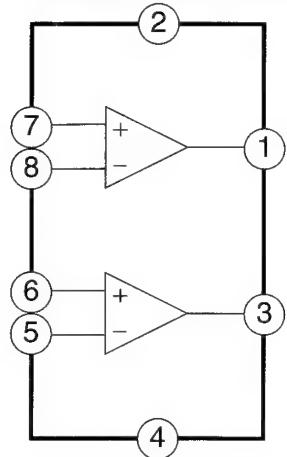


5-5. IC BLOCK DIAGRAMS

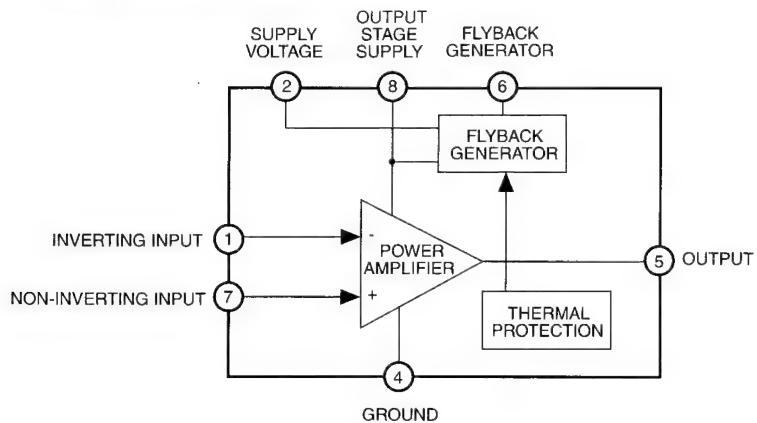
A Board IC303, TDA4665T-T



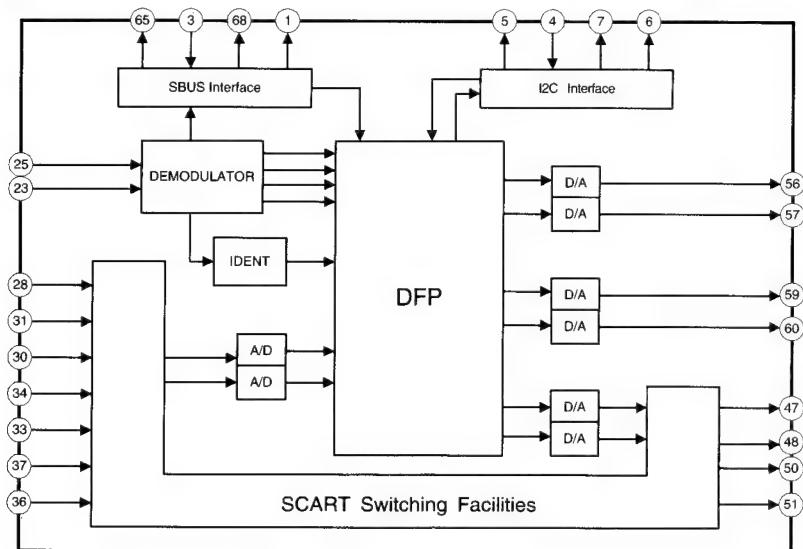
D Board IC261 TDA2822M



D Board IC802 STV9379



A Board IC201 MSP3400C-PS-C6-T/MSP3410B-PS-F7-T



SECTION 6

EXPLODED VIEWS

NOTE :

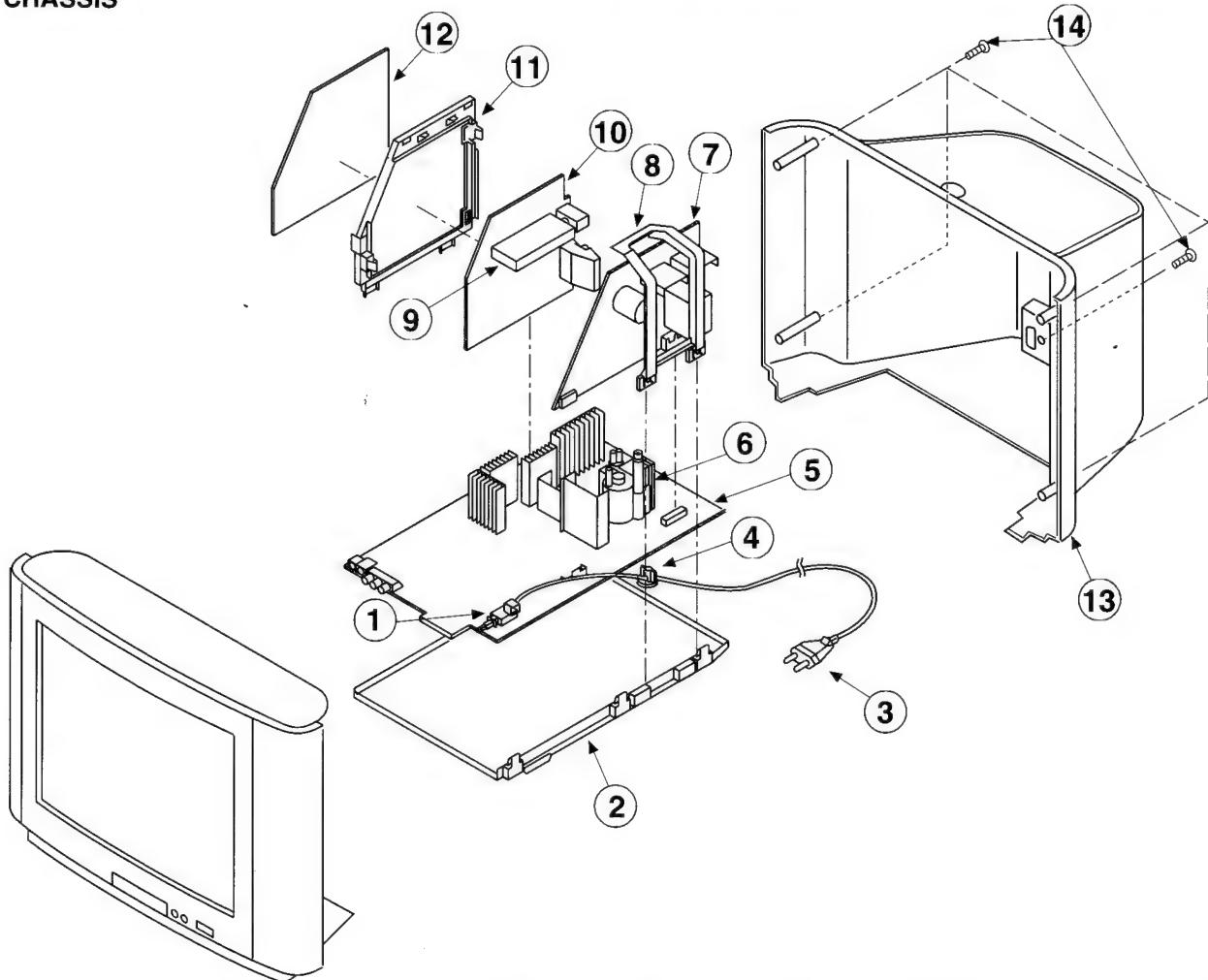
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked **A** are critical for safety.

Replace only with the part number specified.

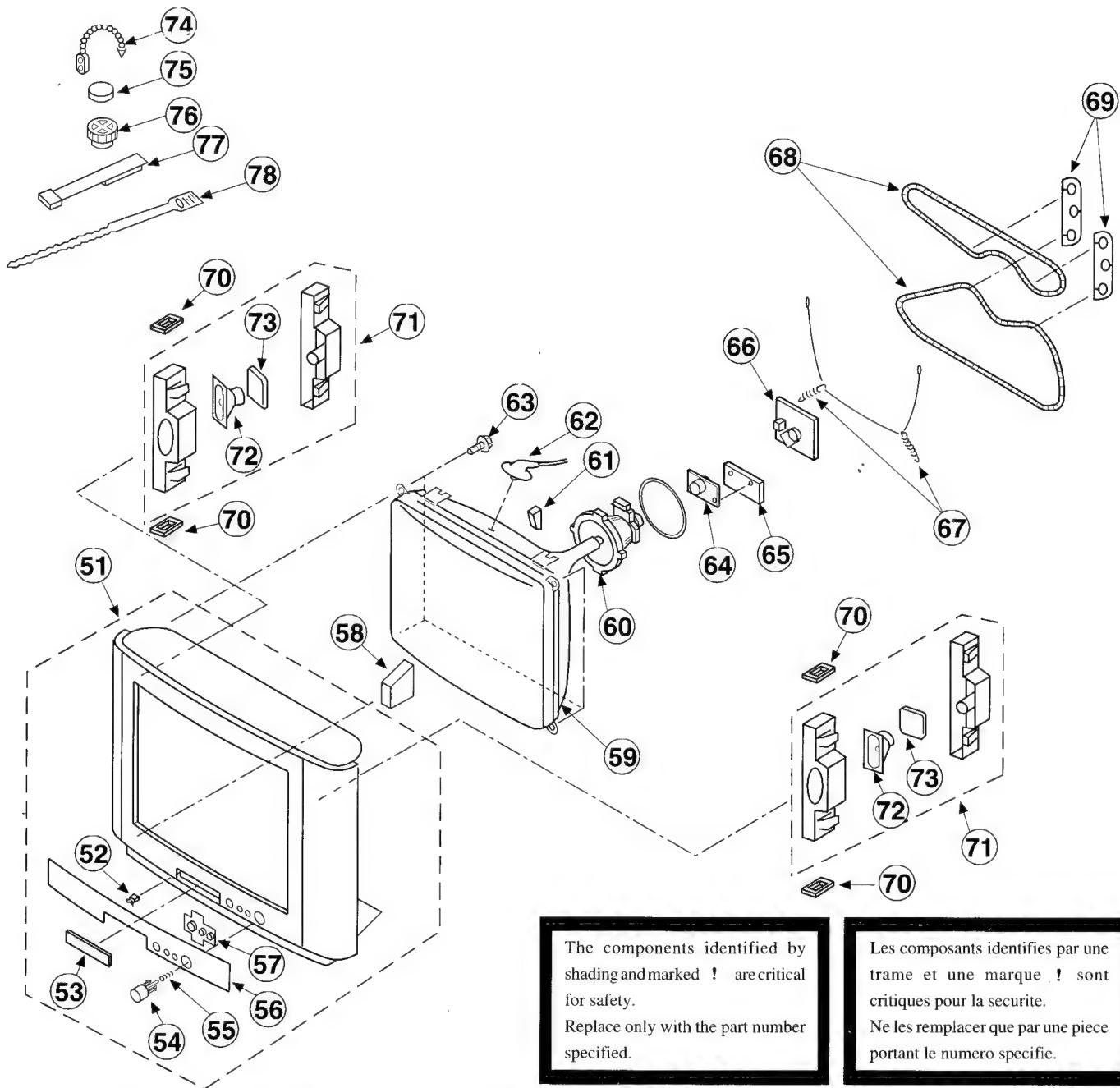
Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	1-571-433-21	SWITCH, PUSH (AC POWER)		11	*4-203-612-01	BRACKET, A-B	
2	*4-203-415-01	BRACKET, MAIN		12	*A-1620-080-A	B BOARD, COMPLETE	
3	1-751-680-11	CORD, POWER (WITH NOISE FILTER)	2.5A/250V	13	4-202-993-11	COVER, REAR	
4	*4-202-531-01	AC CORD LOCK (SC)		14	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
5	*A-1640-246-A	D BOARD, COMPLETE					
6	1-453-222-11	TRANSFORMER ASSY, FLYBACK	(NX-4003/D2B4)				
7	*A-1636-021-A	G BOARD, COMPLETE					
8	*4-203-613-01	SUPPORTER, G					
9	1-693-338-11	TUNER (TUVIF) (AEP)	(KV-29C3A/29C3D/29C3E/29C3K/29C3R)				
	1-693-340-11	TUNER (TUVIF) (FR)	(KV-29C3B)				
10	*A-1632-572-A	A BOARD, COMPLETE (KV-29C3A)					
	*A-1632-570-A	A BOARD, COMPLETE (KV-29C3B)					
	*A-1632-498-A	A BOARD, COMPLETE (KV-29C3D)					
	*A-1632-571-A	A BOARD, COMPLETE (KV-29C3E)					
	*A-1632-574-A	A BOARD, COMPLETE (KV-29C3K)					
	*A-1632-573-A	A BOARD, COMPLETE (KV-29C3R)					

6-2. PICTURE TUBE



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-293-1	BEZNET ASSY (M) (KV-29C3A/29C3D/29C3K/29C3R)	52-57	63	4-203-043-01	SCREW (M), PT	
	X-4200-295-1	BEZNET ASSY (M-N) (KV-29C3B/29C3E)	52-57	64	8-453-005-21	NECK ASSY PICTURE TUBE (NA297-M2)	
52	4-392-036-01	CATCHER PUSH		65	*A-1644-077-A	VM BOARD, COMPLETE	
53	4-203-013-31	DOOR (PAINTED)		66	*A-1638-097-A	C BOARD, COMPLETE	
54	4-202-992-01	BUTTON, POWER		67	4-369-318-51	SPRING, TENSION	
55	4-202-964-01	SPRING		68	1-406-807-11	COIL DEGAUSSING	
56	X-4200-294-1	PANEL ASSY (M) (KV-29C3A/29C3D/29C3K/29C3R)		69	4-202-749-01	HOLDER, D.G.C. (29" /32")	
	X-4200-296-1	PANEL ASSY (M-N) (KV-29C3B/29C3E)		70	*4-202-988-01	CUSHION, BOX	
57	4-203-524-01	WINDOW ORNAMENTAL		71	*A-1678-087-A	BOX ASSY	72-73
58	4-203-098-01	SUPPORTER, CRT		72	1-504-146-11	SPEAKER (5X11CM)	
59	8-733-856-05	PICTURE TUBE (SD-169) (M68LCB60K)		73	4-200-999-01	STOPPER	
60	8-151-466-11	DEFLECTION YOKE (Y29GXC2B)		74	4-308-870-00	CLIP, LEAD WIRE	
61	3-704-495-01	SPACER, DY		75	1-452-032-00	MAGNET, DISK; 10MM Ø	
62	1-251-117-911	CAP ASSY, HIGH VOLTAGE		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
				77	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
				78	3-701-007-00	BAND, BINDING	

SECTION 7

ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF : mF, PF : mmF

MMH : mH, μ H : μ H

B

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

The components identified by shading and marked * are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque * sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
	*A-1620-080-A	B BOARD, COMPLETE		C1806	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	
		*****		C1807	1-126-963-11	ELECT 4.7MF	20% 50V	
				C1808	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	
				C1809	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	
		< CAPACITOR >		C1810	1-162-638-11	CERAMIC CHIP 1MF	16V	
C407	1-126-969-11	ELECT 220MF	20%	50V	C1811	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C408	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1812	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C409	1-162-638-11	CERAMIC CHIP 1MF		16V	C1813	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C410	1-162-638-11	CERAMIC CHIP 1MF		16V	C1814	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C411	1-162-638-11	CERAMIC CHIP 1MF		16V	C1815	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C412	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V	C1816	1-126-963-11	ELECT 4.7MF	20% 50V
C413	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V	C1817	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C414	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C1818	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C415	1-162-638-11	CERAMIC CHIP 1MF		16V	C1819	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C416	1-162-638-11	CERAMIC CHIP 1MF		16V	C1820	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C417	1-162-638-11	CERAMIC CHIP 1MF		16V	C1821	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C418	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1822	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C419	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1823	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C420	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1824	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C421	1-162-568-11	CERAMIC CHIP 0.33MF	10%	16V	C1825	1-126-964-11	ELECT 10MF	20% 50V
C422	1-162-638-11	CERAMIC CHIP 1MF		16V	C1826	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C427	1-126-963-11	ELECT 4.7MF	20%	50V	C1827	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C428	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1828	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C429	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	C1829	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C430	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	C1830	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C431	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1831	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C432	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1850	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C433	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1851	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C434	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C1852	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C435	1-163-145-00	CERAMIC CHIP 0.0015MF	5%	50V	C1856	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C436	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1857	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C437	1-126-964-11	ELECT 10MF	20%	50V	C1858	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C438	1-126-964-11	ELECT 10MF	20%	50V	C1859	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C439	1-126-964-11	ELECT 10MF	20%	50V	C1860	1-126-961-11	ELECT 2.2MF	20% 50V
C440	1-126-964-11	ELECT 10MF	20%	50V	C1861	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C441	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V	C1862	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C442	1-163-125-00	CERAMIC CHIP 220PF	5%	50V	C1864	1-163-002-11	CERAMIC CHIP 270PF	10% 50V
C443	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1866	1-126-964-11	ELECT 10MF	20% 50V
C444	1-162-568-11	CERAMIC CHIP 0.33MF	10%	16V	C1867	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C445	1-126-964-11	ELECT 10MF	20%	50V	C1868	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C446	1-126-963-11	ELECT 4.7MF	20%	50V	C1869	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C447	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	C1870	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C448	1-126-964-11	ELECT 10MF	20%	50V	C1871	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C449	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1872	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C450	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C1873	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C451	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V				
C452	1-163-103-00	CERAMIC CHIP 27PF	5%	50V				
C453	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V				
C454	1-162-568-11	CERAMIC CHIP 0.33MF	10%	16V				
C455	1-126-964-11	ELECT 10MF	20%	50V				
C456	1-126-963-11	ELECT 4.7MF	20%	50V				
C457	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V				
C458	1-126-964-11	ELECT 10MF	20%	50V				
C459	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V				
C460	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V				
C461	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V				

B

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1874	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			< ENCAPSULATED FILTER >	
C1875	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1801	1-239-882-11	FILTER, LOW PASS	
C1879	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1803	1-415-940-11	DELAY LINE	
C1880	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1807	1-236-071-11	ENCAPSULATED COMPONENT	
C1881	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1808	1-236-071-11	ENCAPSULATED COMPONENT	
C1882	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1809	1-236-071-11	ENCAPSULATED COMPONENT	
C1883	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			< IC >	
C1886	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC402	8-759-275-36	IC TDA4780/V3	
C1887	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC403	8-759-421-42	IC SDA9361	
C1889	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1801	8-759-257-59	IC TDA8755T-T	
C1890	1-126-964-11	ELECT 10MF	20% 50V	IC1802	8-759-439-63	IC SAA4945H/V1	
C1891	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1803	8-759-439-27	IC TMS4C2972-28DTR	
C1892	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1809	8-759-438-63	IC SDA9280A41	
C1893	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1812	8-759-444-24	IC 74HCT4046AD/S470	
C1894	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1814	8-759-438-64	IC SAA4952WP/V1	
C1897	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1815	8-759-444-24	IC 74HCT4046AD/S470	
C1898	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1816	8-759-444-25	IC P83C654EBA/560	
C1899	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	IC1823	8-759-991-41	IC LM78L05ACZ	
C1903	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	IC1824	8-759-991-41	IC LM78L05ACZ	
C1904	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V	IC1825	8-759-234-77	IC TC4S66F	
C1910	1-126-964-11	ELECT 10MF	20% 50V			< COIL >	
C1912	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L401	1-408-429-00	INDUCTOR	470UH
C1947	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L402	1-408-429-00	INDUCTOR	470UH
C1948	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L407	1-410-999-11	INDUCTOR CHIP	3.3UH
JR426	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	L1801	1-410-435-21	INDUCTOR	220UH
				L1802	1-410-435-21	INDUCTOR	220UH
		< CONNECTOR >		L1803	1-408-403-00	INDUCTOR	3.3UH
CN412	*1-564-513-11	PLUG, CONNECTOR 10P		L1804	1-408-409-00	INDUCTOR	10UH
CN413	*1-564-511-11	PLUG, CONNECTOR 8P		L1805	1-410-999-11	INDUCTOR CHIP	3.3UH
CN417	*1-564-596-11	PLUG, CONNECTOR 15P		L1808	1-408-403-00	INDUCTOR	3.3UH
CN419	*1-564-512-11	PLUG, CONNECTOR 9P		L1811	1-408-403-00	INDUCTOR	3.3UH
CN1810	*1-564-512-11	PLUG, CONNECTOR 9P		L1813	1-408-403-00	INDUCTOR	3.3UH
CN1815	*1-564-512-11	PLUG, CONNECTOR 9P				< DIODE >	
						< TRANSISTOR >	
D401	8-719-914-43	DIODE DAN202K-T-146		Q415	8-729-900-53	TRANSISTOR DTC114EKA	
D402	8-719-914-43	DIODE DAN202K-T-146		Q416	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D403	8-719-028-00	DIODE MA3033L-TX		Q1801	8-729-216-22	TRANSISTOR 2SA1162-G	
D410	8-719-401-63	DIODE MA3062M-TX		Q1802	8-729-901-01	TRANSISTOR DTC144EK	
D411	8-719-914-43	DIODE DAN202K-T-146		Q1804	8-729-901-01	TRANSISTOR DTC144EK	
D412	8-719-914-43	DIODE DAN202K-T-146		Q1805	8-729-216-22	TRANSISTOR 2SA1162-G	
D415	8-719-914-43	DIODE DAN202K-T-146		Q1808	8-729-901-01	TRANSISTOR DTC144EK	
		< FERRITE BEAD >		Q1809	8-729-901-01	TRANSISTOR DTC144EK	
FB401	1-414-234-11	INDUCTOR, FERRITE BEAD		Q1810	8-729-901-01	TRANSISTOR DTC144EK	
FB402	1-414-234-11	INDUCTOR, FERRITE BEAD		Q1812	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FB403	1-414-234-11	INDUCTOR, FERRITE BEAD				< RESISTOR >	
FB404	1-414-234-11	INDUCTOR, FERRITE BEAD		C1916	1-216-043-91	METAL GLAZE	560 5% 1/10W
FB405	1-414-234-11	INDUCTOR, FERRITE BEAD		JR401	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB406	1-414-234-11	INDUCTOR, FERRITE BEAD		JR402	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB407	1-414-234-11	INDUCTOR, FERRITE BEAD		JR403	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1801	1-414-234-11	INDUCTOR, FERRITE BEAD		JR404	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1802	1-414-234-11	INDUCTOR, FERRITE BEAD		JR405	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1803	1-414-234-11	INDUCTOR, FERRITE BEAD		JR406	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1804	1-414-234-11	INDUCTOR, FERRITE BEAD		JR407	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1805	1-414-234-11	INDUCTOR, FERRITE BEAD		JR408	1-216-295-91	METAL GLAZE	0 5% 1/10W
FB1806	1-414-234-11	INDUCTOR, FERRITE BEAD		JR409	1-216-295-91	METAL GLAZE	0 5% 1/10W
				JR414	1-216-295-91	METAL GLAZE	0 5% 1/10W

B

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
JR415	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1897	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR417	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1898	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR418	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1899	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR420	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1901	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR421	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1904	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR422	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1905	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR423	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1910	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR424	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1911	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1814	1-216-295-91	METAL GLAZE	0 5% 1/10W	R408	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR1815	1-216-295-91	METAL GLAZE	0 5% 1/10W	R409	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
JR1816	1-216-295-91	METAL GLAZE	0 5% 1/10W	R439	1-216-093-00	METAL GLAZE	68K 5% 1/10W
JR1817	1-216-295-91	METAL GLAZE	0 5% 1/10W	R443	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1818	1-216-295-91	METAL GLAZE	0 5% 1/10W	R444	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1819	1-216-295-91	METAL GLAZE	0 5% 1/10W	R445	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1820	1-216-295-91	METAL GLAZE	0 5% 1/10W	R446	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1821	1-216-295-91	METAL GLAZE	0 5% 1/10W	R447	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1822	1-216-295-91	METAL GLAZE	0 5% 1/10W	R448	1-216-043-91	METAL GLAZE	560 5% 1/10W
JR1823	1-216-295-91	METAL GLAZE	0 5% 1/10W	R449	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1824	1-216-295-91	METAL GLAZE	0 5% 1/10W	R450	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1825	1-216-295-91	METAL GLAZE	0 5% 1/10W	R451	1-216-101-00	METAL GLAZE	150K 5% 1/10W
JR1826	1-216-295-91	METAL GLAZE	0 5% 1/10W	R452	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1827	1-216-295-91	METAL GLAZE	0 5% 1/10W	R453	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1828	1-216-295-91	METAL GLAZE	0 5% 1/10W	R454	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1829	1-216-295-91	METAL GLAZE	0 5% 1/10W	R455	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1830	1-216-295-91	METAL GLAZE	0 5% 1/10W	R456	1-216-097-91	METAL GLAZE	100K 5% 1/10W
JR1831	1-216-295-91	METAL GLAZE	0 5% 1/10W	R457	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1832	1-216-295-91	METAL GLAZE	0 5% 1/10W	R458	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1833	1-216-295-91	METAL GLAZE	0 5% 1/10W	R459	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1834	1-216-295-91	METAL GLAZE	0 5% 1/10W	R463	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1835	1-216-295-91	METAL GLAZE	0 5% 1/10W	R465	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1836	1-216-295-91	METAL GLAZE	0 5% 1/10W	R466	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1837	1-216-295-91	METAL GLAZE	0 5% 1/10W	R467	1-216-041-00	METAL GLAZE	470 5% 1/10W
JR1838	1-216-295-91	METAL GLAZE	0 5% 1/10W	R468	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1839	1-216-295-91	METAL GLAZE	0 5% 1/10W	R469	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1840	1-216-295-91	METAL GLAZE	0 5% 1/10W	R470	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
JR1843	1-216-295-91	METAL GLAZE	0 5% 1/10W	R483	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1845	1-216-295-91	METAL GLAZE	0 5% 1/10W	R484	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1846	1-216-295-91	METAL GLAZE	0 5% 1/10W	R490	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1866	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1801	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1868	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1802	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1869	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1803	1-216-296-91	METAL GLAZE	0 5% 1/8W
JR1870	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1804	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
JR1871	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1805	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1872	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1806	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1873	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1807	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1874	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1808	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1875	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1810	1-216-076-00	METAL GLAZE	13K 5% 1/10W
JR1876	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1811	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1877	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1812	1-216-033-00	METAL GLAZE	220 5% 1/10W
JR1885	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1813	1-216-045-00	METAL GLAZE	680 5% 1/10W
JR1886	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1814	1-216-031-00	METAL GLAZE	180 5% 1/10W
JR1887	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1815	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1888	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1816	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1890	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1817	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1891	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1818	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1892	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1819	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1893	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1820	1-216-029-00	METAL GLAZE	150 5% 1/10W
JR1894	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1821	1-216-023-00	METAL GLAZE	82 5% 1/10W
JR1896	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1822	1-216-296-91	METAL GLAZE	0 5% 1/8W
				R1831	1-216-081-00	METAL GLAZE	22K 5% 1/10W

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REF.NO	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
R1832	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W		< CRYSTAL >		
R1833	1-216-041-00	METAL GLAZE	470 5%	1/10W	X401	1-767-343-21	VIBRATOR, CRYSTAL (24.576MHz)	
R1834	1-216-115-00	METAL GLAZE	560K 5%	1/10W	X1801	1-579-175-11	VIBRATOR, CERAMIC (10MHz)	
R1835	1-216-037-00	METAL GLAZE	330 5%	1/10W		*****	*****	
R1844	1-216-081-00	METAL GLAZE	22K 5%	1/10W		*A-1632-572-A	A BOARD, COMPLETE (KV-29C3A)	
R1845	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W		*****	*****	
R1846	1-216-056-00	METAL GLAZE	2K 5%	1/10W		*A-1632-570-A	A BOARD, COMPLETE (KV-29C3B)	
R1847	1-216-115-00	METAL GLAZE	560K 5%	1/10W		*****	*****	
R1848	1-216-025-91	METAL GLAZE	100 5%	1/10W		*A-1632-498-A	A BOARD, COMPLETE (KV-29C3D)	
R1849	1-216-001-00	METAL GLAZE	10 5%	1/10W		*****	*****	
R1850	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*A-1632-571-A	A BOARD, COMPLETE (KV-29C3E)	
R1851	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*****	*****	
R1852	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*A-1632-574-A	A BOARD, COMPLETE (KV-29C3K)	
R1853	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*****	*****	
R1854	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*A-1632-573-A	A BOARD, COMPLETE (KV-29C3R)	
R1855	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		*****	*****	
R1856	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W				
R1857	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W		< CAPACITOR >		
R1858	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C101	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R1859	1-216-017-91	METAL GLAZE	47 5%	1/10W	C102	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R1861	1-216-295-91	METAL GLAZE	0 5%	1/10W	C103	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R1864	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W				(KV-29C3B)
R1865	1-216-295-91	METAL GLAZE	0 5%	1/10W	C105	1-126-965-11	ELECT 22MF	20% 50V
				C111	1-124-907-11	ELECT 10MF	20% 50V	
R1866	1-216-089-91	METAL GLAZE	47K 5%	1/10W	C112	1-164-346-11	CERAMIC CHIP 1MF	16V
R1867	1-216-075-00	METAL GLAZE	12K 5%	1/10W	C114	1-164-346-11	CERAMIC CHIP 1MF	16V
R1868	1-216-089-91	METAL GLAZE	47K 5%	1/10W	C116	1-104-664-11	ELECT 47MF	20% 16V
R1869	1-216-049-91	METAL GLAZE	1K 5%	1/10W	C117	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R1871	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	C118	1-104-664-11	ELECT 47MF	20% 16V
R1879	1-216-049-91	METAL GLAZE	1K 5%	1/10W	C119	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R1880	1-216-085-00	METAL GLAZE	33K 5%	1/10W	C120	1-124-907-11	ELECT 10MF	20% 50V
R1881	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C121	1-164-299-11	CERAMIC CHIP 0.22MF	10% 25V
R1882	1-216-085-00	METAL GLAZE	33K 5%	1/10W	C122	1-164-346-11	CERAMIC CHIP 1MF	16V
R1885	1-216-049-91	METAL GLAZE	1K 5%	1/10W	C126	1-104-664-11	ELECT 47MF	20% 16V
R1886	1-216-295-91	METAL GLAZE	0 5%	1/10W	C127	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R1888	1-216-021-00	METAL GLAZE	68 5%	1/10W	C128	1-104-664-11	ELECT 47MF	20% 16V
R1890	1-216-295-91	METAL GLAZE	0 5%	1/10W	C129	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
R1891	1-216-295-91	METAL GLAZE	0 5%	1/10W	C130	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
R1894	1-216-047-91	METAL GLAZE	820 5%	1/10W	C131	1-164-346-11	CERAMIC CHIP 1MF	16V
R1895	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C132	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
R1896	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C133	1-164-346-11	CERAMIC CHIP 1MF	16V
R1897	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W	C134	1-124-907-11	ELECT 10MF	20% 50V
R1901	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C135	1-164-299-11	CERAMIC CHIP 0.22MF	10% 25V
R1902	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C136	1-124-907-11	ELECT 10MF	20% 50V
R1903	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C137	1-164-506-11	CERAMIC CHIP 4.7MF	16V
R1904	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C138	1-126-964-11	ELECT 10MF	20% 50V
R1905	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C139	1-164-346-11	CERAMIC CHIP 1MF	16V
R1906	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C140	1-164-506-11	CERAMIC CHIP 4.7MF	16V
R1907	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C141	1-164-506-11	CERAMIC CHIP 4.7MF	16V
R1908	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C143	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
R1909	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C144	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
R1910	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C145	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
R1911	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W				(KV-29C3B)
R1912	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C146	1-164-346-11	CERAMIC CHIP 1MF	16V
R1920	1-216-295-91	METAL GLAZE	0 5%	1/10W	C150	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R1921	1-216-295-91	METAL GLAZE	0 5%	1/10W	C151	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R1922	1-216-025-91	METAL GLAZE	100 5%	1/10W	C152	1-124-907-11	ELECT 10MF	20% 50V
R1923	1-216-083-00	METAL GLAZE	27K 5%	1/10W	C153	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V
R1924	1-216-083-00	METAL GLAZE	27K 5%	1/10W	C154	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V
				C155	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C156	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C320	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C157	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C321	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C159	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C322	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C160	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C323	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C162	1-164-346-11	CERAMIC CHIP 1MF	16V	C324	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C163	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C325	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C164	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C350	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C165	1-164-346-11	CERAMIC CHIP 1MF	16V	C351	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C166	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C355	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C167	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C356	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C200	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C357	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C201	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1001	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C202	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1002	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C203	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1003	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C204	1-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	C1004	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C205	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1005	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C206	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1006	1-165-321-11	CERAMIC CHIP 0.68MF	10% 16V
C207	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1007	1-164-344-11	CERAMIC CHIP 0.068MF	10% 25V
C208	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1020	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C209	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1021	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C210	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1022	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C211	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1035	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C212	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1036	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C213	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1039	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C214	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1040	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C215	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1041	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C216	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1042	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C217	1-124-907-11	ELECT 10MF	20% 50V	C1043	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C218	1-124-907-11	ELECT 10MF	20% 50V	C1060	1-163-001-11	CERAMIC CHIP 220PF	10% 50V
C219	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C1301	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C220	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C1401	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C221	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1402	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C222	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1403	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C223	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1404	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C224	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1405	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C227	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1406	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C228	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1407	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C229	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1408	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C230	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1409	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C231	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C1413	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C232	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C1414	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C233	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1417	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C234	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1418	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C303	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1420	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C304	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1421	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1430	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C306	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1431	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1432	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1433	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1434	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C310	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1435	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C311	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1437	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1438	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C313	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1439	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C314	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1441	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C315	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1442	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C316	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1443	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C317	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1444	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C318	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	C1445	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C319	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	C1446	1-164-506-11	CERAMIC CHIP 4.7MF	16V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1447	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	D217	8-719-158-49	DIODE RD12SB2
C1448	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	D218	8-719-158-49	DIODE RD12SB2
C1450	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	D219	8-719-158-49	DIODE RD12SB2
C1451	1-163-231-11	CERAMIC CHIP 15PF	5%	50V	D220	8-719-158-49	DIODE RD12SB2
C1452	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	D221	8-719-158-49	DIODE RD12SB2
C1460	1-163-263-11	CERAMIC CHIP 330PF	5%	50V	D223	8-719-158-49	DIODE RD12SB2
C1461	1-163-263-11	CERAMIC CHIP 330PF	5%	50V	D301	8-719-401-41	DIODE MA3051L-TX
C1462	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	D1007	8-719-914-44	DIODE DAP202K
C2001	1-164-506-11	CERAMIC CHIP 4.7MF	16V		D1008	8-719-914-43	DIODE DAN202K
C2002	1-164-506-11	CERAMIC CHIP 4.7MF	16V		D1009	8-719-105-91	DIODE RD5.6M-B2
C2004	1-164-506-11	CERAMIC CHIP 4.7MF	16V		D1010	8-719-105-91	DIODE RD5.6M-B2
C2005	1-164-506-11	CERAMIC CHIP 4.7MF	16V		D1405	8-719-914-42	DIODE DA204K
C2007	1-163-038-91	CERAMIC CHIP 0.1MF	25V		D2001	8-719-036-58	DIODE MA3030-H(TX)
C2020	1-164-222-11	CERAMIC CHIP 0.22MF	25V				< FERRITE BEAD >
C2021	1-164-222-11	CERAMIC CHIP 0.22MF	25V		FB101	1-414-235-11	INDUCTOR, FERRITE BEAD
C2023	1-163-038-91	CERAMIC CHIP 0.1MF	25V		FB102	1-414-235-11	INDUCTOR, FERRITE BEAD
C2024	1-163-251-11	CERAMIC CHIP 100PF	5%	50V			< ENCAPSULATED FILTER >
C2025	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	FL102	1-236-071-11	ENCAPSULATED COMPONENT
C2026	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	FL103	1-236-071-11	ENCAPSULATED COMPONENT
C2028	1-163-031-11	CERAMIC CHIP 0.01MF	50V		FL200	1-236-071-11	ENCAPSULATED COMPONENT
C2029	1-164-222-11	CERAMIC CHIP 0.22MF	25V		FL201	1-233-764-21	FILTER
C2030	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	FL202	1-236-071-11	ENCAPSULATED COMPONENT
C2031	1-164-222-11	CERAMIC CHIP 0.22MF	25V		FL203	1-236-071-11	ENCAPSULATED COMPONENT
C2033	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	FL302	1-236-071-11	ENCAPSULATED COMPONENT
				FL1001	1-236-071-11	ENCAPSULATED COMPONENT	
CD1001	1-527-992-31	OSCILLATOR, CERAMIC		FL1002	1-236-071-11	ENCAPSULATED COMPONENT	
CF200	1-409-327-00	TRAP, CERAMIC (6.5MHZ)		FL1402	1-236-071-11	ENCAPSULATED COMPONENT	
				FL1403	1-236-071-11	ENCAPSULATED COMPONENT	
				FL1404	1-236-071-11	ENCAPSULATED COMPONENT	
CN101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		FL1405	1-236-071-11	ENCAPSULATED COMPONENT	
CN115	*1-564-524-11	PLUG, CONNECTOR 9P		FL2001	1-236-071-11	ENCAPSULATED COMPONENT	
CN117	*1-564-520-11	PLUG, CONNECTOR 5P		FL2003	1-236-071-11	ENCAPSULATED COMPONENT	
CN201	1-766-296-11	CONNECTOR, DUAL SCART					< IC >
CN1413	1-564-523-11	PLUG, CONNECTOR 8P		IC101	8-752-068-45	IC CXA1855Q-T6	
CN2012	*1-564-525-11	PLUG, CONNECTOR 10P		IC102	8-759-267-25	IC LM2940CT-9.0	
				IC104	8-759-514-57	IC BA7046F	
				IC201	8-759-376-56	IC MSP3400C-PS-C6-T-ND (KV-29C3A/29C3D/29C3K/29C3R)	
				IC302	8-759-437-33	IC MSP3410B-PS-F7-T-ND (KV-29C3B/29C3E)	
D102	8-719-158-49	DIODE RD12SB2		IC303	8-759-439-58	IC TDA9143/N2	
D103	8-719-158-49	DIODE RD12SB2		IC303	8-759-288-85	IC TDA4665T-T	
D104	8-719-158-49	DIODE RD12SB2		IC1001	8-759-351-92	IC SDA30C164-GEG	
D105	8-719-158-49	DIODE RD12SB2		IC1002	8-759-439-66	IC M27C4001-15C1	
D199	8-719-914-43	DIODE DAN202K		IC1002	1-750-797-11	SOCKET, PLCC ; IC1002	
D200	8-719-158-49	DIODE RD12SB2		IC1003	8-759-378-21	IC ST24C16FB6	
D201	8-719-158-49	DIODE RD12SB2		IC1004	8-759-259-18	IC MB3793-42PNF	
D202	8-719-158-49	DIODE RD12SB2		IC1401	8-759-439-58	IC TDA9143/N2	
D203	8-719-158-49	DIODE RD12SB2		IC1403	8-759-438-61	IC SDA9288X-A141	
D204	8-719-158-49	DIODE RD12SB2		IC2001	8-759-438-65	IC SDA5273-C126-GEG	
D205	8-719-158-49	DIODE RD12SB2					< COIL >
D206	8-719-158-49	DIODE RD12SB2		L101	1-412-751-11	INDUCTOR	
D207	8-719-158-49	DIODE RD12SB2		L321	1-412-006-31	INDUCTOR CHIP	
D208	8-719-158-49	DIODE RD12SB2		L1401	1-410-428-11	INDUCTOR	
D209	8-719-158-49	DIODE RD12SB2					18UH (KV-29C3B)
D210	8-719-158-49	DIODE RD12SB2					10UH
D211	8-719-158-49	DIODE RD12SB2					56UH
D212	8-719-158-49	DIODE RD12SB2					
D213	8-719-158-49	DIODE RD12SB2					
D214	8-719-158-49	DIODE RD12SB2					
D215	8-719-158-49	DIODE RD12SB2		Q102	8-729-920-74	TRANSISTOR 2SC2412K-QR	
				Q103	8-729-039-67	TRANSISTOR BSS83 (KV-29C3B)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q104	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-29C3B)		R114	1-216-311-00	METAL GLAZE	6.8 5% 1/10W
Q106	8-729-216-22	TRANSISTOR 2SA1162-G (KV-29C3B)		R115	1-216-311-00	METAL GLAZE	6.8 5% 1/10W
Q107	8-729-216-22	TRANSISTOR 2SA1162-G		R116	1-216-311-00	METAL GLAZE	6.8 5% 1/10W
Q108	8-729-920-74	TRANSISTOR 2SC2412K-QR		R117	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q109	8-729-216-22	TRANSISTOR 2SA1162-G		R118	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q110	8-729-038-96	TRANSISTOR IMZ1A-T109		R119	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q112	8-729-216-22	TRANSISTOR 2SA1162-G		R120	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q120	8-729-027-52	TRANSISTOR DTC1244EKA-T146		R121	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q200	8-729-920-74	TRANSISTOR 2SC2412K-QR		R122	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q205	8-729-920-74	TRANSISTOR 2SC2412K-QR		R123	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q301	8-729-920-74	TRANSISTOR 2SC2412K-QR		R124	1-216-113-00	METAL GLAZE	470K 5% 1/10W
Q302	8-729-920-74	TRANSISTOR 2SC2412K-QR		R126	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q315	8-729-038-96	TRANSISTOR IMZ1A-T109		R127	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q316	8-729-038-96	TRANSISTOR IMZ1A-T109		R128	1-216-113-00	METAL GLAZE	470K 5% 1/10W
Q317	8-729-038-96	TRANSISTOR IMZ1A-T109		R129	1-208-774-11	METAL CHIP	470 0.50% 1/10W
Q318	8-729-920-74	TRANSISTOR 2SC2412K-QR		R130	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q1001	8-729-920-74	TRANSISTOR 2SC2412K-QR		R131	1-216-039-00	METAL GLAZE	390 5% 1/10W
Q1301	8-729-216-22	TRANSISTOR 2SA1162-G		R132	1-216-089-91	METAL GLAZE	47K 5% 1/10W
Q1305	8-729-216-22	TRANSISTOR 2SA1162-G		R133	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q1311	8-729-920-74	TRANSISTOR 2SC2412K-QR		R134	1-216-089-91	METAL GLAZE	47K 5% 1/10W
Q1312	8-729-920-74	TRANSISTOR 2SC2412K-QR		R135	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q1401	8-729-038-96	TRANSISTOR IMZ1A-T109		R136	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q1402	8-729-038-96	TRANSISTOR IMZ1A-T109		R137	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q1403	8-729-038-96	TRANSISTOR IMZ1A-T109		R138	1-216-022-00	METAL GLAZE	75 5% 1/10W
Q1404	8-729-920-74	TRANSISTOR 2SC2412K-QR		R139	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q1411	8-729-920-74	TRANSISTOR 2SC2412K-QR		R141	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q1412	8-729-920-74	TRANSISTOR 2SC2412K-QR		R142	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q2005	8-729-920-74	TRANSISTOR 2SC2412K-QR		R143	1-216-025-91	METAL GLAZE	100 5% 1/10W
Q2006	8-729-027-59	TRANSISTOR DTC144EKA-T146		R144	1-216-025-91	METAL GLAZE	100 5% 1/10W
Q2007	8-729-027-59	TRANSISTOR DTC144EKA-T146		R146	1-216-033-00	METAL GLAZE	220 5% 1/10W
< RESISTOR >							
JR301	1-216-295-91	METAL GLAZE	0 5% 1/10W	R148	1-208-774-11	METAL CHIP	470 0.50% 1/10W
JR302	1-216-295-91	METAL GLAZE	0 5% 1/10W	R149	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR303	1-216-295-91	METAL GLAZE	0 5% 1/10W	R151	1-208-774-11	METAL CHIP	470 0.50% 1/10W
JR1001	1-216-295-91	METAL GLAZE	0 5% 1/10W	R152	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1002	1-216-295-91	METAL GLAZE	0 5% 1/10W	R153	1-216-311-00	METAL GLAZE	6.8 5% 1/10W
JR1003	1-216-295-91	METAL GLAZE	0 5% 1/10W	R154	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1004	1-216-295-91	METAL GLAZE	0 5% 1/10W	R156	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1006	1-216-295-91	METAL GLAZE	0 5% 1/10W	R157	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1008	1-216-295-91	METAL GLAZE	0 5% 1/10W	R159	1-216-304-11	METAL GLAZE	3.3 5% 1/10W
JR1009	1-216-295-91	METAL GLAZE	0 5% 1/10W	R160	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1010	1-216-295-91	METAL GLAZE	0 5% 1/10W	R162	1-216-089-91	METAL GLAZE	47K 5% 1/10W
JR1011	1-216-295-91	METAL GLAZE	0 5% 1/10W	R163	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1301	1-216-295-91	METAL GLAZE	0 5% 1/10W	R166	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1302	1-216-295-91	METAL GLAZE	0 5% 1/10W	R167	1-216-039-00	METAL GLAZE	390 5% 1/10W
JR1402	1-216-295-91	METAL GLAZE	0 5% 1/10W	R168	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
JR1403	1-216-295-91	METAL GLAZE	0 5% 1/10W	R169	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R101	1-216-210-00	METAL GLAZE	3.3K 5% 1/8W	R170	1-216-021-00	METAL GLAZE	68 5% 1/10W
R102	1-216-025-91	METAL GLAZE	100 5% 1/10W	R171	1-216-021-00	METAL GLAZE	68 5% 1/10W
R103	1-216-025-91	METAL GLAZE	100 5% 1/10W	R172	1-216-021-00	METAL GLAZE	68 5% 1/10W
R104	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R173	1-216-021-00	METAL GLAZE	68 5% 1/10W
R106	1-216-033-00	METAL GLAZE	220 5% 1/10W	R174	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R108	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R175	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R109	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R176	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R110	1-216-097-91	METAL GLAZE	100K 5% 1/10W	R177	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R111	1-216-041-00	METAL GLAZE	470 5% 1/10W	R178	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R112	1-216-041-00	METAL GLAZE	470 5% 1/10W	R179	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R113	1-216-041-00	METAL GLAZE	470 5% 1/10W	R180	1-216-113-00	METAL GLAZE	470K 5% 1/10W
				R181	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
				R182	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
				R183	1-216-033-00	METAL GLAZE	220 5% 1/10W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R184	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1038	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R185	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1039	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R186	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1040	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R187	1-216-107-00	METAL GLAZE	270K 5% 1/10W	R1041	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R188	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1042	1-216-025-91	METAL GLAZE	100 5% 1/10W
R189	1-218-755-11	METAL CHIP	130K 0.50% 1/10W	R1044	1-216-025-91	METAL GLAZE	100 5% 1/10W
R190	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1045	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R191	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R1046	1-216-025-91	METAL GLAZE	100 5% 1/10W
R192	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1047	1-216-009-00	METAL GLAZE	22 5% 1/10W
R193	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1048	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R194	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1050	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R195	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1051	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R196	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1052	1-216-037-00	METAL GLAZE	330 5% 1/10W
R197	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1053	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R198	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1056	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R199	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1059	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R200	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1060	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R201	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1061	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R202	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R1062	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R203	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R1063	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R204	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1070	1-216-025-91	METAL GLAZE	100 5% 1/10W
R205	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1071	1-216-025-91	METAL GLAZE	100 5% 1/10W
R207	1-216-039-00	METAL GLAZE	390 5% 1/10W	R1075	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R208	1-216-039-00	METAL GLAZE	390 5% 1/10W	R1301	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R213	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1302	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R214	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1303	1-216-037-00	METAL GLAZE	330 5% 1/10W
R215	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1304	1-216-037-00	METAL GLAZE	330 5% 1/10W
R272	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1325	1-216-009-00	METAL GLAZE	22 5% 1/10W
R311	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R1340	1-216-037-00	METAL GLAZE	330 5% 1/10W
R312	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1341	1-216-017-91	METAL GLAZE	47 5% 1/10W
R313	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1342	1-216-017-91	METAL GLAZE	47 5% 1/10W
R314	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1344	1-216-037-00	METAL GLAZE	330 5% 1/10W
R315	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1401	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R317	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1402	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R330	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1403	1-216-025-91	METAL GLAZE	100 5% 1/10W
R331	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1404	1-216-025-91	METAL GLAZE	100 5% 1/10W
R332	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1406	1-216-037-00	METAL GLAZE	330 5% 1/10W
R333	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1407	1-216-037-00	METAL GLAZE	330 5% 1/10W
R334	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1410	1-216-041-00	METAL GLAZE	470 5% 1/10W
R335	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1411	1-216-041-00	METAL GLAZE	470 5% 1/10W
R336	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1412	1-216-041-00	METAL GLAZE	470 5% 1/10W
R337	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1413	1-216-041-00	METAL GLAZE	470 5% 1/10W
R338	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1414	1-216-041-00	METAL GLAZE	470 5% 1/10W
R340	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1415	1-216-041-00	METAL GLAZE	470 5% 1/10W
R341	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1416	1-216-041-00	METAL GLAZE	470 5% 1/10W
R342	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1417	1-216-041-00	METAL GLAZE	470 5% 1/10W
R343	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1418	1-216-041-00	METAL GLAZE	470 5% 1/10W
R345	1-216-025-91	METAL GLAZE	100 5% 1/10W	R1420	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R351	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1421	1-216-047-91	METAL GLAZE	820 5% 1/10W
R352	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1422	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R353	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1423	1-216-045-00	METAL GLAZE	680 5% 1/10W
R374	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1424	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1001	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1425	1-216-047-91	METAL GLAZE	820 5% 1/10W
R1011	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1426	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1012	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1427	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1030	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1428	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1033	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1430	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1034	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1431	1-216-025-91	METAL GLAZE	100 5% 1/10W
R1036	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1433	1-216-043-91	METAL GLAZE	560 5% 1/10W
R1037	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R1434	1-216-043-91	METAL GLAZE	560 5% 1/10W

A

G

The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R1435	1-216-043-91	METAL GLAZE	560	5%	1/10W	C609	1-129-718-00	FILM	0.022MF	5%	630V
R1436	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	C610	1-126-953-11	ELECT	2200MF	20%	35V
R1440	1-216-037-00	METAL GLAZE	330	5%	1/10W	C611	1-126-953-11	ELECT	2200MF	20%	35V
R1441	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C612	1-124-903-11	ELECT	1MF	20%	50V
R1442	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C613	1-128-548-11	ELECT	4700MF	20%	25V
R1450	1-216-029-00	METAL GLAZE	150	5%	1/10W	C614	1-128-548-11	ELECT	4700MF	20%	25V
R1451	1-216-029-00	METAL GLAZE	150	5%	1/10W	C615	1-110-626-11	ELECT	330MF	20%	160V
R1452	1-216-029-00	METAL GLAZE	150	5%	1/10W	C616	1-164-625-11	CERAMIC	680PF	10%	500V
R1461	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C617	1-136-559-11	MYLAR	0.0047MF	10%	400V
R1462	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C618	1-104-989-91	FILM	0.0022MF	5%	200V
R1463	1-216-041-00	METAL GLAZE	470	5%	1/10W	C621	1-136-519-12	FILM	0.17MF	20%	300V
R2001	1-216-025-91	METAL GLAZE	100	5%	1/10W	C622	1-136-518-12	FILM	0.33MF	20%	300V
R2002	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C624	1-113-890-61	CERAMIC	0.0022MF	20%	250V
R2020	1-216-041-00	METAL GLAZE	470	5%	1/10W	C626	1-164-518-61	CERAMIC	0.0022MF	20%	400V
R2021	1-216-073-00	METAL GLAZE	10K	5%	1/10W	C627	1-126-940-11	ELECT	330MF	20%	25V
R2022	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	C628	1-126-965-11	ELECT	22MF	20%	50V
R2023	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	C629	1-162-599-12	CERAMIC	0.0047MF	250V	
R2024	1-216-049-91	METAL GLAZE	1K	5%	1/10W	C630	1-162-599-12	CERAMIC	0.0047MF	250V	
R2025	1-216-025-91	METAL GLAZE	100	5%	1/10W	C631	1-161-554-91	CERAMIC	0.0047MF	250V	
R2026	1-216-025-91	METAL GLAZE	100	5%	1/10W	C632	1-125-555-11	ELECT	330MF	20%	400V

5 TUNER 5

TU101 1-693-338-11 TUNER (TUVIF) (AEP)
(KV-29C3A/29C3D/29C3E/29C3K/29C3R)
1-693-340-11 TUNER (TUVIF) (FR) (KV-29C3B)
1-473-953-11 ADAPTOR IEC : TU101

< CRYSTAL >

X200	1-760-628-11	VIBRATOR, CRYSTAL (18.432MHz)
X301	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)
X302	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)
X1001	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)
X1401	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)
X1402	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)
X1403	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)

本节将介绍如何使用 `PyTorch` 的 `nn` 模块来实现一个简单的神经网络。

*A-1636-021-A G BOARD, COMPLETE

*4-203-609-01 HOLDER, G

< CAPACITOR >

C602	1-165-127-11	CERAMIC	470PF	10%	500V
C603	1-165-127-11	CERAMIC	470PF	10%	500V
C604	1-136-171-00	FILM	0.33MF	5%	50V
C605	1-137-399-11	FILM	0.1MF	5%	50V
C606	1-136-171-00	FILM	0.33MF	5%	50V
C607	1-137-399-11	FILM	0.1MF	5%	50V
C608	1-164-625-11	CERAMIC	680PF	10%	500V

CN0008	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN0009	1-508-785-00	PIN, CONNECTOR (5MM PITCH) 3P
CN0701	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P
CN0702	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P
CN0703	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P

5 DIODE >

D601	8-719-510-53	DIODE D4SB60L
D602	8-719-991-33	DIODE 1SS133T-77
D603	8-719-109-89	DIODE RD5.6ESB2
D605	8-719-047-31	DIODE RBA-402L
D607	8-719-510-12	DIODE D10SC4M
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D607
D608	8-719-510-12	DIODE D10SC4M
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D608
D609	8-719-047-31	DIODE RBA-402L
D610	8-719-312-39	DIODE R2K-V1
D611	8-719-510-64	DIODE S2LA20F

D614	8-719-911-19	DIODE	1SS119-25
D615	8-719-911-19	DIODE	1SS119-25
D616	8-719-911-19	DIODE	1SS119-25
D617	8-719-911-19	DIODE	1SS119-25
D618	8-719-911-19	DIODE	1SS119-25
D619	8-719-911-19	DIODE	1SS119-25
D620	8-719-911-19	DIODE	1SS119-25
D621	8-719-911-19	DIODE	1SS119-25
D622	8-719-510-64	DIODE	S2LA20F
D623	8-719-510-64	DIODE	S2LA20F

The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

G C

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D625	8-719-911-19	DIODE 1SS119-25		R616	1-205-949-11	WIREWOUND	1.8 5%
D626	8-719-911-19	DIODE 1SS119-25		R617	1-205-949-11	WIREWOUND	1.8 5% 10W
D627	8-719-911-19	DIODE 1SS119-25		R619	1-244-945-90	CARBON	1M 5% 1/2W
D628	8-719-911-19	DIODE 1SS119-25		R620	1-218-965-11	METAL	3.2M 5% 1W
D630	8-719-991-33	DIODE 1SS133T-77		R621	1-249-417-11	CARBON	1K 5% 1/4W F
D633	8-719-991-33	DIODE 1SS133T-77		R622	1-249-430-11	CARBON	12K 5% 1/4W
D634	8-719-991-33	DIODE 1SS133T-77		R623	1-249-436-11	CARBON	39K 5% 1/4W
D636	8-719-511-40	DIODE S1VB40		R624	1-249-425-11	CARBON	4.7K 5% 1/4W
			< FERRITE BEAD >	R625	1-247-815-91	CARBON	220 5% 1/4W
FB601	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R626	1-247-863-91	CARBON	22K 5% 1/4W
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R627	1-247-815-91	CARBON	220 5% 1/4W
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R628	1-247-807-31	CARBON	100 5% 1/4W
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R629	1-249-428-11	CARBON	8.2K 5% 1/4W
			< IC >	R636	1-207-905-00	WIREWOUND	0.27 10% 2W F
IC601	1-810-051-11	POWER MODULE DM-48		R637	1-249-389-11	CARBON	4.7 5% 1/4W F
IC602	8-719-040-64	PHOTO COUPLED PC123FV21		R639	1-247-791-91	CARBON	22 5% 1/4W
IC603	8-759-510-52	IC TEA7605		R640	1-247-791-91	CARBON	22 5% 1/4W
			< COIL >	R641	1-247-791-91	CARBON	22 5% 1/4W
L605	1-412-523-21	INDUCTOR 6.8UH		R642	1-247-791-91	CARBON	22 5% 1/4W
L606	1-412-523-21	INDUCTOR 6.8UH		R651	1-215-880-00	METAL OXIDE	10 5% 2W F
			< TRANSFORMER >	R652	1-247-891-00	CARBON	330K 5% 1/4W
LE602	1-429-860-11	TRANSFORMER, LINE FILTER		R653	1-247-891-00	CARBON	330K 5% 1/4W
			< IC LINK >	R654	1-247-891-00	CARBON	330K 5% 1/4W
PS601	1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R655	1-247-891-00	CARBON	330K 5% 1/4W
PS602	1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R656	1-249-439-11	CARBON	68K 5% 1/4W
PS604	1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R657	1-249-429-11	CARBON	10K 5% 1/4W
PS605	1-801-549-21	PROTECTOR MODULE 4.0A/MP400		R658	1-249-421-11	CARBON	2.2K 5% 1/4W
			< TRANSISTOR >	R659	1-249-425-11	CARBON	4.7K 5% 1/4W
Q601	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R660	1-249-429-11	CARBON	10K 5% 1/4W
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q601		R661	1-249-421-11	CARBON	2.2K 5% 1/4W
Q602	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R662	1-249-421-11	CARBON	2.2K 5% 1/4W
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q602		R663	1-249-429-11	CARBON	10K 5% 1/4W
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE		R664	1-249-429-11	CARBON	10K 5% 1/4W
			< RELAY >	R667	1-249-377-11	CARBON	0.47 5% 1/4W F
Q604	8-729-200-21	TRANSISTOR 2SC2500-B		R670	1-249-417-11	CARBON	1K 5% 1/4W
Q605	8-729-119-76	TRANSISTOR 2SC1175-HFE					
Q608	8-729-200-21	TRANSISTOR 2SC2500-B					
Q610	8-729-119-76	TRANSISTOR 2SA933S-RT					
Q611	8-729-119-78	TRANSISTOR 2SC1740S-RT					
Q612	8-729-119-76	TRANSISTOR 2SA933S-RT					
Q615	8-729-200-21	TRANSISTOR 2SC2500-B					
Q621	8-729-200-21	TRANSISTOR 2SC2500-B					
			< RESISTOR >				
R601	1-202-933-61	FUSIBLE	0.1	10%	1/2W F		
R602	1-247-891-00	CARBON	330K	5%	1/4W		
R603	1-247-891-00	CARBON	330K	5%	1/4W		
R604	1-216-369-00	METAL OXIDE	1	5%	2W F		
R605	1-247-891-00	CARBON	330K	5%	1/4W		
R606	1-247-891-00	CARBON	330K	5%	1/4W		
R607	1-216-369-00	METAL OXIDE	1	5%	2W F		
R608	1-247-887-00	CARBON	220K	5%	1/4W		
R609	1-249-429-11	CARBON	10K	5%	1/4W F		
R610	1-249-419-11	CARBON	1.5K	5%	1/4W F		
R611	1-249-377-11	CARBON	0.47	5%	1/4W F		
			< VARISTOR >				
VDR601	1-810-977-21	VARISTOR ERZV10D621					

			*A-1638-097-A C BOARD, COMPLETE				

			4-382-854-11 SCREW (M3X10), P, SW (+)				
			< CAPACITOR >				
C3701	1-162-114-00	CERAMIC	0.0047MF				2KV

C

The components identified by shading and marked **C** are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque **C** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
C3703	1-107-662-11	ELECT	22MF	20%	250V	Q3717	8-729-906-70	TRANSISTOR BF871-127
C3712	1-102-978-00	CERAMIC	220PF	5%	50V	Q3718	8-729-906-70	TRANSISTOR BF871-127
C3713	1-102-978-00	CERAMIC	220PF	5%	50V			< RESISTOR >
C3714	1-102-978-00	CERAMIC	220PF	5%	50V			
C3716	1-128-528-11	ELECT	470MF	20%	16V	R3701	1-202-884-11	SOLID
C3720	1-162-116-00	CERAMIC	680PF	10%	2KV	R3702	1-202-884-11	SOLID
						R3703	1-202-549-00	SOLID
						R3705	1-216-377-00	METAL OXIDE
						R3706	1-216-377-00	METAL OXIDE
								1
								5%
								1W
								F
CN3701	1-695-915-11	TAB (CONTACT)				R3707	1-249-416-11	CARBON
CN3703	*1-564-512-11	PLUG, CONNECTOR 9P				R3708	1-249-416-11	CARBON
CN3704	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P				R3709	1-249-416-11	CARBON
						R3710	1-215-922-11	METAL OXIDE
						R3711	1-202-549-00	SOLID
								6.8K
								5%
								3W
								F
								100
								20%
								1/2W
D3701	8-719-991-33	DIODE 1SS133T-77				R3712	1-215-922-11	METAL OXIDE
D3702	8-719-991-33	DIODE 1SS133T-77				R3713	1-202-549-00	SOLID
D3703	8-719-991-33	DIODE 1SS133T-77				R3714	1-215-922-11	METAL OXIDE
D3704	8-719-991-33	DIODE 1SS133T-77				R3715	1-202-549-00	SOLID
D3705	8-719-991-33	DIODE 1SS133T-77				R3716	1-249-405-11	CARBON
D3706	8-719-991-33	DIODE 1SS133T-77				R3717	1-249-405-11	CARBON
D3707	8-719-991-33	DIODE 1SS133T-77				R3718	1-249-405-11	CARBON
D3708	8-719-991-33	DIODE 1SS133T-77				R3721	1-247-885-00	CARBON
D3709	8-719-991-33	DIODE 1SS133T-77				R3723	1-247-885-00	CARBON
D3710	8-719-908-03	DIODE GP08D				R3725	1-249-419-11	CARBON
D3711	8-719-901-83	DIODE 1SS83				R3726	1-249-419-11	CARBON
D3712	8-719-901-83	DIODE 1SS83				R3727	1-249-419-11	CARBON
D3713	8-719-901-83	DIODE 1SS83				R3728	1-247-815-91	CARBON
D3714	8-719-991-33	DIODE 1SS133T-77				R3729	1-247-815-91	CARBON
D3715	8-719-018-82	DIODE RGP02-20EL-6394				R3730	1-247-815-91	CARBON
D3716	8-719-991-33	DIODE 1SS133T-77				R3731	1-249-403-11	CARBON
D3717	8-719-991-33	DIODE 1SS133T-77				R3732	1-249-403-11	CARBON
D3718	8-719-991-33	DIODE 1SS133T-77				R3733	1-249-403-11	CARBON
D3719	8-719-991-33	DIODE 1SS133T-77				R3734	1-202-549-00	SOLID
						R3735	1-247-885-00	CARBON
								68
								5%
								1/4W
								100
								20%
								180K
								5%
								1/4W
								1.5K
								5%
								1/4W
								1.5K
								5%
								1/4W
								220
								5%
								1/4W
								220
								5%
								1/4W
								220
								5%
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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		*A-1640-246-A D BOARD, COMPLETE	*****	C814	1-129-702-00	FILM	0.001MF 10% 400V
		< CAPACITOR >		C816	1-109-961-11	FILM	0.75MF 5% 400V
				C817	1-136-759-11	FILM	0.039MF 5% 630V
				C819	1-137-104-11	FILM	0.033MF 10% 250V
C101	1-126-965-11	ELECT	22MF 20% 50V	C822	1-126-967-11	ELECT	47MF 20% 50V
C236	1-136-165-00	FILM	0.1MF 5% 50V	C823	1-102-129-00	CERAMIC	0.01MF 10% 50V
C237	1-136-165-00	FILM	0.1MF 5% 50V	C824	1-162-117-00	CERAMIC	100PF 10% 500V
C238	1-126-967-11	ELECT	47MF 20% 16V	C825	1-126-964-11	ELECT	10MF 20% 50V
C241	1-126-967-11	ELECT	47MF 20% 16V	C827	1-102-228-00	CERAMIC	470PF 10% 500V
C242	1-126-953-11	ELECT	2200MF 20% 35V	C835	1-107-655-11	ELECT	47MF 20% 250V
C243	1-136-165-00	FILM	0.1MF 5% 50V	C836	1-102-228-00	CERAMIC	470PF 10% 500V
C244	1-126-953-11	ELECT	2200MF 20% 35V	C837	1-102-228-00	CERAMIC	470PF 10% 500V
C245	1-136-165-00	FILM	0.1MF 5% 50V	C838	1-102-228-00	CERAMIC	470PF 10% 500V
C260	1-126-964-11	ELECT	10MF 20% 50V	C841	1-106-375-12	MYLAR	0.022MF 10% 250V
C261	1-126-964-11	ELECT	10MF 20% 50V	C842	1-106-357-00	MYLAR	0.0039MF 10% 400V
C262	1-104-665-11	ELECT	100MF 20% 25V	C852	1-126-968-11	ELECT	100MF 20% 50V
C263	1-136-165-00	FILM	0.1MF 5% 50V	C854	1-102-129-00	CERAMIC	0.01MF 10% 50V
C264	1-126-933-11	ELECT	100MF 20% 16V	C855	1-126-941-11	ELECT	470MF 20% 25V
C265	1-136-165-00	FILM	0.1MF 5% 50V	C856	1-102-129-00	CERAMIC	0.01MF 10% 50V
C266	1-104-665-11	ELECT	100MF 20% 25V	C857	1-126-941-11	ELECT	470MF 20% 25V
C269	1-126-967-11	ELECT	47MF 20% 16V	C860	1-106-220-00	MYLAR	0.1MF 10% 100V
C270	1-136-165-00	FILM	0.1MF 5% 50V	C862	1-130-789-00	FILM	1MF 5% 100V
C271	1-126-965-11	ELECT	22MF 20% 50V	C866	1-137-040-11	FILM	0.0022MF 10% 400V
C272	1-136-165-00	FILM	0.1MF 5% 50V	C871	1-136-562-11	MYLAR	0.0082MF 20% 400V
C273	1-136-161-00	FILM	0.047MF 5% 50V	C872	1-106-220-00	MYLAR	0.1MF 10% 100V
C274	1-124-925-11	ELECT	2.2MF 20% 50V	C873	1-161-754-00	CERAMIC	0.001MF 10% 2KV
C275	1-124-925-11	ELECT	2.2MF 20% 50V	C874	1-164-645-11	CERAMIC	1000PF 10% 500V
C276	1-126-967-11	ELECT	47MF 20% 16V	C878	1-106-220-00	MYLAR	0.1MF 10% 100V
C277	1-126-934-11	ELECT	220MF 20% 16V	C900	1-101-810-00	CERAMIC	100PF 5% 500V
C278	1-107-714-11	ELECT	10MF 20% 16V	C901	1-101-810-00	CERAMIC	100PF 5% 500V
C279	1-126-965-11	ELECT	22MF 20% 50V	C902	1-137-372-11	FILM	0.022MF 5% 50V
C280	1-136-169-00	FILM	0.22MF 5% 50V	C903	1-137-372-11	FILM	0.022MF 5% 50V
C281	1-126-967-11	ELECT	47MF 20% 16V	C905	1-126-964-11	ELECT	10MF 20% 50V
C283	1-136-169-00	FILM	0.22MF 5% 50V	C906	1-136-166-00	FILM	0.12MF 5% 50V
C620	1-126-967-11	ELECT	47MF 20% 50V	C907	1-124-903-11	ELECT	1MF 20% 50V
C639	1-126-964-11	ELECT	10MF 20% 50V	C908	1-124-903-11	ELECT	1MF 20% 50V
C652	1-136-171-00	FILM	0.33MF 5% 50V	C909	1-136-153-00	FILM	0.01MF 5% 50V
C653	1-104-661-91	ELECT	330MF 20% 16V	C1619	1-106-220-00	MYLAR	0.1MF 10% 100V
C654	1-104-664-11	ELECT	47MF 20% 25V	C1621	1-106-367-00	MYLAR	0.01MF 10% 400V
C656	1-126-967-11	ELECT	47MF 20% 16V	C1628	1-136-244-11	FILM	0.1MF 5% 50V
C657	1-136-165-00	FILM	0.1MF 5% 50V	C1629	1-130-481-00	FILM	0.0068MF 5% 50V
C658	1-136-165-00	FILM	0.1MF 5% 50V	C1632	1-136-203-11	FILM	0.01MF 10% 250V
C659	1-136-165-00	FILM	0.1MF 5% 50V	C2701	1-126-964-11	ELECT	10MF 20% 50V
C660	1-136-164-00	FILM	0.082MF 5% 50V	C2702	1-104-664-11	ELECT	47MF 20% 25V
C666	1-104-661-91	ELECT	330MF 20% 16V	C2706	1-102-820-00	CERAMIC	330PF 5% 50V
C667	1-136-165-00	FILM	0.1MF 5% 50V				
C668	1-136-165-00	FILM	0.1MF 5% 50V				
C669	1-136-165-00	FILM	0.1MF 5% 50V				
C670	1-136-165-00	FILM	0.1MF 5% 50V				
C671	1-136-165-00	FILM	0.1MF 5% 50V	CN0001	*1-564-520-11	PLUG, CONNECTOR 5P	
C801	1-123-024-21	ELECT	33MF 160V	CN0002	*1-568-878-51	PIN, CONNECTOR 3P	
C802	1-136-207-11	FILM	0.047MF 10% 250V	CN0004	1-568-878-51	PIN, CONNECTOR 3P	
C804	1-102-110-00	CERAMIC	220PF 10% 50V	CN0005	1-695-915-11	TAB (CONTACT)	
C805	1-102-117-00	CERAMIC	820PF 10% 50V	CN0101	*1-573-296-21	CONNECTOR, BOARD TO BOARD 10P	
C808	1-162-116-00	CERAMIC	680PF 10% 2KV	CN0102	1-695-297-11	CONNECTOR, BOARD TO BOARD 20P	
C809	1-162-116-00	CERAMIC	680PF 10% 2KV	CN0521	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P	
C810	1-136-558-11	FILM	0.0039MF 10% 400V	CN0712	*1-580-844-11	PIN, CONNECTOR (POWER)	
C811	1-111-229-11	FILM	0.018MF 3% 2KV	CN0713	*1-695-292-11	PIN, CONNECTOR (POWER)	
C812	1-136-759-11	FILM	0.039MF 5% 630V	CN0743	*1-564-596-11	PLUG, CONNECTOR 15P	
C813	1-109-844-11	FILM	0.68MF 5% 400V	CN0745	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
				CN0746	*1-568-879-11	PIN, CONNECTOR 4P	
				CN3133	1-568-882-51	PIN, CONNECTOR 7P	

D

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK				
< DIODE >											
D101	8-719-982-27	DIODE MTZJ-33C		IC603	8-759-095-34	IC LM2940T-8.0					
D236	8-719-911-19	DIODE 1SS119-25		IC604	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC603					
D237	8-719-911-19	DIODE 1SS119-25		IC604	8-759-513-71	IC PQ05RF21					
D238	8-719-911-19	DIODE 1SS119-25		IC604	4-202-373-01	SPRING, IC ; IC604					
D239	8-719-911-19	DIODE 1SS119-25		IC606	8-759-991-43	IC LM78L12ACZ					
D262	8-719-911-19	DIODE 1SS119-25		IC607	8-759-513-71	IC PQ05RF21					
D264	8-719-911-19	DIODE 1SS119-25		IC801	4-202-373-01	SPRING, IC ; IC607					
D276	8-719-911-19	DIODE 1SS119-25		IC801	8-759-103-93	IC UPC393C					
D278	8-719-911-19	DIODE 1SS119-25		IC802	8-759-192-71	IC STV9379					
D279	8-719-911-19	DIODE 1SS119-25		IC802	4-202-373-01	SPRING, IC ; IC802					
D280	8-719-911-19	DIODE 1SS119-25		IC900	8-742-014-00	RECEIVER HIC SBX1981-51					
D281	8-719-911-19	DIODE 1SS119-25		IC901	8-749-012-12	IC IS474					
D282	8-719-911-19	DIODE 1SS119-25		IC2701	8-759-603-37	IC M5216P					
D612	8-719-911-19	DIODE 1SS119-25		< JACK >							
D613	8-719-911-19	DIODE 1SS119-25		J900	1-764-606-11	JACK					
D631	8-719-911-19	DIODE 1SS119-25		J901	1-568-678-11	TERMINAL BLOCK, S 3P					
D632	8-719-911-19	DIODE 1SS119-25		< COIL >							
D633	8-719-911-19	DIODE 1SS119-25		L602	1-412-525-31	INDUCTOR 10UH					
D802	8-719-979-99	DIODE ERD08M-15		L603	1-412-525-31	INDUCTOR 10UH					
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D802		L801	1-459-123-00	COIL, DUST CORE(PAC)					
D803	8-719-043-14	DIODE ESAD39M-06C		L802	1-459-123-00	COIL, DUST CORE(PAC)					
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D803		L803	1-459-123-00	COIL, DUST CORE(PAC)					
D804	8-719-971-20	DIODE ERC38-06		L806	1-459-592-11	COIL (WITH CORE) (PMC)					
D805	8-719-908-03	DIODE GP08D		L807	1-412-524-11	INDUCTOR 8.2UH					
D806	8-719-908-03	DIODE GP08D		L811	1-459-104-00	COIL, WITH CORE 10MH					
D810	8-719-979-85	DIODE EGP20G		L813	1-459-104-00	COIL, WITH CORE 10MH					
D811	8-719-302-43	DIODE EL1Z		L814	1-422-613-11	COIL, AIR CORE					
D812	8-719-510-26	DIODE D1NL20		L815	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH					
D813	8-719-510-26	DIODE D1NL20		L816	1-408-947-00	INDUCTOR 2.2MMH					
D814	8-719-908-03	DIODE GP08D		L820	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH					
D815	8-719-110-13	DIODE RD9.1ESB2		L900	1-408-409-00	INDUCTOR 10UH					
D816	8-719-110-41	DIODE RD15ES-B2		L901	1-408-409-00	INDUCTOR 10UH					
D817	8-719-911-19	DIODE 1SS119-25		L902	1-249-417-11	CARBON 1K 5% 1/4W					
D818	8-719-911-19	DIODE 1SS119-25		L903	1-249-417-11	CARBON 1K 5% 1/4W					
D819	8-719-911-19	DIODE 1SS119-25		L1604	1-459-104-00	COIL, WITH CORE					
D871	8-719-911-19	DIODE 1SS119-25		L1605	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE					
D873	8-719-911-19	DIODE 1SS119-25		L1622	1-406-674-11	COIL, CHOKE 3.3MMH					
D874	8-719-911-19	DIODE 1SS119-25		< TRANSISTOR >							
D901	8-719-030-11	DIODE SLA-570KT3F		Q276	8-729-030-03	TRANSISTOR DTC144ESA-TP					
	*4-203-258-01	HOLDER, LED ; D901		Q277	8-729-119-76	TRANSISTOR 2SA1175-HFE					
D1609	8-719-979-85	DIODE EGP20G		Q278	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D1611	8-719-911-19	DIODE 1SS119-25		Q279	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D2701	8-719-911-19	DIODE 1SS119-25		Q280	8-729-119-78	TRANSISTOR 2SC2785-HFE					
D2702	8-719-911-19	DIODE 1SS119-25		Q281	8-729-119-78	TRANSISTOR 2SC2785-HFE					
	< CONNECTOR >										
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P		Q282	8-729-119-78	TRANSISTOR 2SC2785-HFE					
	< FUSE >										
1601	8-532-505-41	FUSE		Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE					
	*1-533-725-11	HOLDER, FUSE		Q607	8-729-029-56	TRANSISTOR DTA144ESA					
	< IC >			Q613	8-729-030-03	TRANSISTOR DTC144ESA-TP					
IC236	8-759-190-89	IC TDA7265		Q614	8-729-029-56	TRANSISTOR DTA144ESA					
	4-202-373-01	SPRING, IC ; IC236		Q616	8-729-030-03	TRANSISTOR DTC144ESA-TP					
	4-202-710-01	SPACER, INSULATING ; IC236		Q617	8-729-029-67	TRANSISTOR DTC114ESA-TP					
IC260	8-759-330-93	IC TDA7309		Q618	8-729-029-56	TRANSISTOR 2SA933S					
IC261	8-759-502-21	IC TDA2822M		Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE					
	< CONNECTOR >										
IC236	8-759-190-89	IC TDA7265		Q624	8-729-119-78	TRANSISTOR 2SC2785-HFE					
	4-202-373-01	SPRING, IC ; IC236		Q801	8-729-119-80	TRANSISTOR 2SC2688-LK					
	4-202-710-01	SPACER, INSULATING ; IC236		Q802	8-729-821-07	TRANSISTOR 2SC3997CA					
	< FUSE >				4-200-399-01	SPACER, IC ; Q802					
	< IC >				4-382-854-11	SCREW (M3X10), P, SW (+) ; Q802					

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q803	8-729-039-68	TRANSISTOR IRF620		R635	1-215-926-00	METAL OXIDE	33K 5% 3W F
	4-202-373-01	SPRING, IC ; Q803		R638	1-249-425-11	CARBON	4.7K 5% 1/4W
Q804	8-729-039-68	TRANSISTOR IRF620		R644	1-249-425-11	CARBON	4.7K 5% 1/4W
Q1610	8-729-119-78	TRANSISTOR 2SC2785-HFE		R645	1-249-410-11	CARBON	270 5% 1/4W
Q1611	8-729-017-06	TRANSISTOR 2SC4793		R646	1-249-403-11	CARBON	68 5% 1/4W
Q2701	8-729-119-78	TRANSISTOR 2SC2785-HFE		R647	1-249-420-11	CARBON	1.8K 5% 1/4W
	< RESISTOR >			R665	1-249-425-11	CARBON	4.7K 5% 1/4W
				R666	1-249-413-11	CARBON	470 5% 1/4W
R236	1-249-424-11	CARBON	3.9K 5% 1/4W	R676	1-249-437-11	CARBON	47K 5% 1/4W
R237	1-249-417-11	CARBON	1K 5% 1/4W	R677	1-249-437-11	CARBON	47K 5% 1/4W
R239	1-249-424-11	CARBON	3.9K 5% 1/4W	R678	1-249-421-11	CARBON	2.2K 5% 1/4W
R240	1-249-417-11	CARBON	1K 5% 1/4W	R679	1-247-815-91	CARBON	220 5% 1/4W
R244	1-249-413-11	CARBON	470 5% 1/4W	R802	1-215-916-00	METAL OXIDE	680 5% 3W F
R245	1-249-430-11	CARBON	12K 5% 1/4W	R803	1-215-916-00	METAL OXIDE	680 5% 3W F
R246	1-249-430-11	CARBON	12K 5% 1/4W	R804	1-215-916-00	METAL OXIDE	680 5% 3W F
R247	1-249-413-11	CARBON	470 5% 1/4W	R805	1-215-923-00	METAL OXIDE	10K 5% 3W F
R248	1-249-425-11	CARBON	4.7K 5% 1/4W	R806	1-249-411-11	CARBON	330 5% 1/4W
R249	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R807	1-247-843-11	CARBON	3.3K 5% 1/4W
R250	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R808	1-216-385-11	METAL OXIDE	0.47 5% 3W F
R251	1-249-429-11	CARBON	10K 5% 1/4W	R809	1-215-880-00	METAL OXIDE	10 5% 2W F
R252	1-249-429-11	CARBON	10K 5% 1/4W	R810	1-215-914-11	METAL OXIDE	330 5% 3W F
R260	1-247-863-91	CARBON	22K 5% 1/4W	R811	1-216-434-11	METAL OXIDE	1.8K 5% 1W F
R261	1-247-863-91	CARBON	22K 5% 1/4W	R817	1-202-972-61	FUSIBLE	1 5% 1/4W F
R262	1-249-421-11	CARBON	2.2K 5% 1/4W	R818	1-249-377-11	CARBON	0.47 5% 1/4W F
R263	1-249-421-11	CARBON	2.2K 5% 1/4W	R819	1-249-377-11	CARBON	0.47 5% 1/4W F
R264	1-212-857-00	FUSIBLE	10 5% 1/4W F	R820	1-214-907-00	METAL	56K 1% 1/2W
R265	1-249-389-11	CARBON	4.7 5% 1/4W F	R821	1-249-428-11	CARBON	8.2K 5% 1/4W
R266	1-249-389-11	CARBON	4.7 5% 1/4W F	R823	1-249-420-11	CARBON	1.8K 5% 1/4W
R267	1-247-815-91	CARBON	220 5% 1/4W	R834	1-247-887-00	CARBON	220K 5% 1/4W
R268	1-247-815-91	CARBON	220 5% 1/4W	R835	1-249-434-11	CARBON	27K 5% 1/4W
R269	1-249-415-11	CARBON	680 5% 1/4W	R837	1-249-422-11	CARBON	2.7K 5% 1/4W
R270	1-249-415-11	CARBON	680 5% 1/4W	R842	1-249-399-11	CARBON	33 5% 1/4W F
R271	1-247-742-11	CARBON	180 5% 1/2W F	R843	1-202-822-00	SOLID	2.2K 20% 1/2W
R277	1-249-419-11	CARBON	1.5K 5% 1/4W	R844	1-249-424-11	CARBON	3.9K 5% 1/4W
R278	1-249-441-11	CARBON	100K 5% 1/4W	R845	1-247-881-00	CARBON	120K 5% 1/4W
R279	1-249-429-11	CARBON	10K 5% 1/4W	R846	1-249-422-11	CARBON	2.7K 5% 1/4W
R280	1-249-425-11	CARBON	4.7K 5% 1/4W	R847	1-249-437-11	CARBON	47K 5% 1/4W
R281	1-249-437-11	CARBON	47K 5% 1/4W	R848	1-249-425-11	CARBON	4.7K 5% 1/4W
R282	1-249-430-11	CARBON	12K 5% 1/4W	R849	1-249-429-11	CARBON	10K 5% 1/4W
R283	1-249-429-11	CARBON	10K 5% 1/4W	R850	1-249-389-11	CARBON	4.7 5% 1/4W F
R284	1-249-432-11	CARBON	18K 5% 1/4W	R851	1-216-394-00	METAL OXIDE	2.7 5% 3W F
R285	1-249-425-11	CARBON	4.7K 5% 1/4W	R854	1-249-436-11	CARBON	39K 5% 1/4W
R286	1-249-421-11	CARBON	2.2K 5% 1/4W	R855	1-249-417-11	CARBON	1K 5% 1/4W
R287	1-249-412-11	CARBON	390 5% 1/4W	R857	1-202-822-00	SOLID	2.2K 20% 1/2W
R288	1-249-421-11	CARBON	2.2K 5% 1/4W	R859	1-249-432-11	CARBON	18K 5% 1/4W
R289	1-249-421-11	CARBON	2.2K 5% 1/4W	R860	1-247-843-11	CARBON	3.3K 5% 1/4W
R290	1-247-807-31	CARBON	100 5% 1/4W	R861	1-249-417-11	CARBON	1K 5% 1/4W
R291	1-249-421-11	CARBON	2.2K 5% 1/4W	R862	1-249-383-11	CARBON	1.5 5% 1/4W F
R292	1-249-429-11	CARBON	10K 5% 1/4W	R863	1-216-475-11	METAL OXIDE	120 5% 3W F
R293	1-249-429-11	CARBON	10K 5% 1/4W	R865	1-249-436-11	CARBON	39K 5% 1/4W
R294	1-249-429-11	CARBON	10K 5% 1/4W	R866	1-249-432-11	CARBON	18K 5% 1/4W
R295	1-247-885-00	CARBON	180K 5% 1/4W	R867	1-216-389-11	METAL OXIDE	1 5% 3W F
R296	1-247-885-00	CARBON	180K 5% 1/4W	R868	1-249-418-11	CARBON	1.2K 5% 1/4W
R297	1-247-807-31	CARBON	100 5% 1/4W	R871	1-249-441-11	CARBON	100K 5% 1/4W
R298	1-247-807-31	CARBON	100 5% 1/4W	R872	1-247-895-91	CARBON	470K 5% 1/4W
R630	1-249-429-11	CARBON	10K 5% 1/4W	R873	1-247-887-00	CARBON	220K 5% 1/4W
R631	1-215-477-00	METAL	220K 1% 1/4W	R875	1-247-843-11	CARBON	3.3K 5% 1/4W
R632	1-249-417-11	CARBON	1K 5% 1/4W	R895	1-215-866-11	METAL OXIDE	330 5% 1W F
R633	1-249-429-11	CARBON	10K 5% 1/4W	R900	1-247-815-91	CARBON	220 5% 1/4W
R634	1-247-895-91	CARBON	470K 5% 1/4W	R901	1-249-417-11	CARBON	1K 5% 1/4W

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VM

The components identified by shading and marked  are critical for safety.
Replace only with the part number specified.

Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

VM

The components identified by shading and marked **†** are critical for safety.
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Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1719	1-249-416-11	CARBON	820	5%	1/4W		
R1720	1-216-089-91	METAL GLAZE	47K	5%	1/10W		
R1721	1-249-414-11	CARBON	560	5%	1/4W		
R1723	1-249-429-11	CARBON	10K	5%	1/4W		
R1724	1-216-689-11	METAL GLAZE	39K	5%	1/10W		
R1725	1-249-413-11	CARBON	470	5%	1/4W		
R1726	1-216-035-00	METAL GLAZE	270	5%	1/10W		
R1727	1-249-402-11	CARBON	56	5%	1/4W		
R1730	1-216-121-91	METAL GLAZE	1M	5%	1/10W		
R1731	1-216-049-91	METAL GLAZE	1K	5%	1/10W		
R1736	1-247-807-31	CARBON	100	5%	1/4W		
R1737	1-216-075-00	METAL GLAZE	12K	5%	1/10W		
R1738	1-216-174-00	METAL GLAZE	100	5%	1/8W		
R1739	1-216-222-00	METAL GLAZE	10K	5%	1/8W		
R1740	1-216-174-00	METAL GLAZE	100	5%	1/8W		
R1741	1-216-166-00	METAL GLAZE	47	5%	1/8W		
R1743	1-216-021-00	METAL GLAZE	68	5%	1/10W		
R1744	1-216-150-91	METAL GLAZE	10	5%	1/8W		
R1745	1-216-150-91	METAL GLAZE	10	5%	1/8W		

MISCELLANEOUS							

				1-406-807-11	COIL, DEGAUSSING		
				1-452-032-00	MAGNET, DISK; 10MM Ø		
				1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø		
				1-453-222-11	TRANSFORMER ASSY, FLYBACK		(NX-4003/U2B4)
				1-504-146-11	SPEAKER (5X11CM)		
				1-250-3317-31	CAP ASSY, HIGH-VOLTAGE		
				1-571-453-21	SWITCH, PUSH (AC POWER)		
				1-693-338-11	TUNER (TUVIF) (AEP)		
						(KV-29C3A/29C3D/29C3E/29C3K/29C3R)	
				1-693-340-11	TUNER (TUVIF) (FR) (KV-29C3B)		
				1-751-680-11	CORD, POWER (WITH NOISE FILTER)		
						2.5A/250V	
				8-451-456-11	DELETION VORE (Y29GXC2B)		
				8-453-005-21	NECK ASSY. (NA299-M2)		
				V901	8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)	

ACCESSORIES AND PACKING MATERIALS

*4-203-485-11 CUSHION (LOWER) (ASSY)
 *4-203-486-01 CUSHION (UPPER) (ASSY)
 *4-203-487-01 INDIVIDUAL CARTON

4-203-639-41 MANUAL, INSTRUCTION (KV-29C3A)
 (ITALIAN)

4-203-639-51 MANUAL, INSTRUCTION (KV-29C3B)
 (FRENCH/GERMAN/ITALIAN/DUTCH)

4-203-639-11 MANUAL, INSTRUCTION (KV-29C3D)
 (GERMAN/ENGLISH/DUTCH)

4-203-639-71 MANUAL, INSTRUCTION (KV-29C3E)
 (SPANISH)

4-203-639-81 MANUAL, INSTRUCTION (KV-29C3E)
 (PORTUGUESE/DANISH/SWEDISH/NORWEGIAN/
 FINNISH)

4-203-639-91 MANUAL, INSTRUCTION (KV-29C3K/29C3R)

*4-395-957-01 BAG, PROTECTION

REMOTE COMMANDER

1-473-692-11 COMMANDER, STANDARD TYPE (RM-862)
